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Photo by Mike Dickerson

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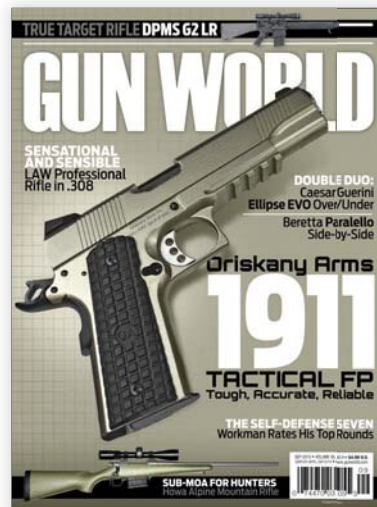


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Mike Dickerson
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Photo courtesy of Caesar Guerini

Photo courtesy of Oriskany Arms



JACK MITCHELL: Writer, Gunsmith & Sportsman

By Craig Hodgkins

As we were going to press this month, we were informed of the passing of Jack Mitchell, a highly respected writer, editor and gunsmith, and a good friend of the firearm industry. Most recently, Mitchell was on the advertising sales staff of Safari Club International, where he carried the additional title of Special Projects Editor.

For more than 25 years, however, he served in a variety of writing, editing and sales capacities for *Gun World*.

Mitchell made his first appearance on our masthead as Advertising Manager in June of 1977, and his initial byline followed a couple of months later above a story featuring a "do-it-yourself" Snake Eyes double derringer kit, an appropriate piece for a graduate of the Colorado School of Trades.

"No one has the natural patience to become a gunsmith," he wrote of his choice of careers. "It is a quality that is learned, usually with intermittent fits of anger and frustration. Fortunately, gunsmithing schools like CST recognize this failing among all incoming students and make certain they overcome this problem with several exasperating, time-consuming work projects. The student either does each job perfectly or he does it over again. Each student finds his own pace."

Mitchell's own pace kept him more than busy after he moved to California to work for *Gun World*. For parts of four decades he tested hundreds of firearms, and wrote magazine features for us along with several other publications. His books included *The Gun Digest Book of Pistolsmithing* (1980) and *The Gun Digest Book of Rifle-smithing* (1982).

I met Mitchell—in very appropriate fashion—at the SHOT Show (he never missed them) in the company of his longtime friend Steve Comus, his former editor at *Gun World* and currently the publisher of *Safari* magazine. I spent the next hour or so in the smoking area listening to him spin several hilarious tales, most of which involved this magazine's founder, Jack Lewis. I learned a lot that day, and not just about Lewis.

"It is an industry of unique individuals," he once wrote, "some eccentric and some just plain wacky, but held together by a special bond of dedication and pride in their work."

We thank Jack Mitchell for his dedication to this publication and the shooting sports. He will be missed.

CRAG

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Kel-Tec makes a pair of rugged tactical lights to complement their carry guns. Whether you choose the conventional CL-42 (bottom left) or the unique CL-43 (right) designed specifically for use with a weapon, you'll get a solid light that blasts 420 Lumens into the dark.

MORE THAN GUNS

By **Tim Stetzer**

Kel-Tec Puts their CNC Experience to Work on Handy Weapon Accessories

If you're reading this (or any) issue of *Gun World*, then you are probably familiar with Kel-Tec CNC and their line of compact polymer framed pistols and innovative rifles, shotguns and carbines. I'd be willing to bet, however, that you may not have known Kel-Tec also makes a sturdy folding knife and a pair of rugged tactical lights.

I've been working with the tac lights for a number of months now in my day job as a police officer, and I've had the chance to shake them out both as EDC lights and as duty lights.

CL-42 AND CL-43

Kel-Tec offers two lights for sale through their online store, the conventional pattern CL-42 and the rather unique CL-43. Both share a number of common features. For example, both are CNC machined from extruded 6061 aluminum, both have finishes similar to Kel-Tec's firearms — either hard coat anodizing or Cerekoting depending on color — and both have matte black steel pocket clips.



► To change batteries on the CL-43, you need to remove the two Allen screws and then remove the light's base plate.

▲ The CL-42 is a lightweight conventional pattern tactical light weighing only 2.6 ounces with batteries. The author found it compact and very easy to carry.

Both models are powered by CR123 Lithium batteries, two for the CL-42 and three for the CL-43, and they have an output of 420 Lumens with a run time of 2 hours 25 minutes for the 42 and 3 hours 35 minutes for the 43. The CL-42 is available in only two colors, black and olive drab, whereas the CL-43 is offered in those colors plus coyote tan, red, orange and yellow. The CL-42 weighs in at a petite 2.6 ounces whereas the CL-43 adds about an ounce more with its extra battery and tube, clocking in at 3.7 ounces. Both lights are rated water resistant to one meter for 30 minutes and for a one-meter drop onto a hard surface.

Operation is simple, which is what I prefer. A light press allows momentary operation and full press steady on. No strobes or light levels to have to scroll through or remembering what setting you last left the light on, and for a tactical

light that is certainly my preference. I've accidentally strobed people when I just wanted to light them up and had my light on the dimmest setting when I needed immediate bright light and vice versa.

Over the years at work I've found that I much prefer two modes: on and off. That way, I always know what's going to happen when I press the button.

KEL-TEC TAKES ON THE NIGHT

When I went through the police Instructor Development course run by the FBI, we had to come up with a curriculum for a class and teach it as part of the course. I did mine on duty light selection, which initially brought a few chuckles, but after sitting through the class the instructors actually agreed that it wouldn't make a bad class for police academy cadets!

The fact is that, as a police offi-

cer, our flashlight is probably our second most used tool besides our pen. Obviously, your duty weapon is critically important, but in the course of your career you're going to use your light way more often than your gun, so it pays to invest in a good one. Much of our work occurs in the evenings and overnight, and even for folks working the day shift it's not uncommon to have to go into buildings with poor lighting or no electricity.

It's also a critical tool used in conjunction with your weapon as you need to identify any potential threats and you can't hit what you can't see. This utility is not just for cops though; it makes sense for any concealed carry user to have a good light for the same reasons. Even on the rare occasions when I'm unable to carry a firearm with me, I still carry a light. It's a handy tool to have in general and a bright tactical light, even without a strobe, can blind or distract an opponent and give you time to either close or get away, whichever is more prudent at the time.

WEAPON LIGHTS

When it comes to using your light as a weapon either Kel-Tec light works well. The CL-42 is compact and the knurled aluminum tube provides for a secure grip. Its activation button is in the traditional rear-mounted location, and it falls right under the thumb when you grip the light.

I found its trim size and light weight very easy to carry and the 420 lumens that it put out were more than sufficient for anything I would typically do at night, including my department's night fire qualification course.

The CL-43 takes a slightly different approach, which explains its unusual side-by-side tube body. While the additional tube provides a spot for the third CR123 battery (without adding additional length to the light) it also houses the on and off button. But rather than



▲ The Kel-Tec CL-43 is specially designed for use in conjunction with a firearm. It works especially well when using the Harries technique.



▲ The CL-43 can be used in a number of different holds for use in conjunction with a pistol like this Kel-Tec P-32.



▲ By grasping the light in a traditional bezel down "ice pick" grip, you can use your pinky to activate the CL-43's momentary switch.



▲ You can also use the CL-43 in a grip like a pistol with the butt of the light tucked into the web of your hand. With this method you can use your index finger to activate the light.

being mounted on the tail of the light, it is mounted forward of the battery facing the bezel. While this layout initially seems counter-intuitive, it actually works rather well once you get used to it.

Instead of using your thumb to activate the button you can grasp it one of two ways for use with the Harries flashlight technique. The method I prefer is to grip the light in my support hand and use my pinky finger to activate the button. I have a very secure grip on the light in this position and my hand seems to fall into a more natural position than when using a traditional rear mounted switch.

The other thing you can do is grip the CL-43 almost like a pistol and use your trigger finger to activate the light. This also works well, although I prefer the more secure grip I have on the light wrapping my whole fist around it and using my pinky.

MY DRUTHERS

After using these lights for a number of months I am impressed with their build quality, convenience and function. They are solidly made with good fit and finish and I never experienced an issue with either one. The 420-Lumen light level seems like a good compromise between having enough light to do the job and having so much that it washes things out in enclosed spaces or inside houses with white or light color walls.

If I had to choose between the two I'd probably go with the more conventional CL-42. I liked the lighter weight and trimmer design, and I found it much easier to swap batteries — on the 42 you just need to unscrew the head to change batteries.

On the CL-43 you have to use the included Allen wrench to take two screws out of the butt cap to access the battery compartment. This is a slower process and not something I'd care to do while working the road in a squad car during the night shift if my light died before I was off duty. Still, the extra battery life on the 43 is more than welcome, and the form factor geared toward use as a weapon light will make it worthwhile for many folks.

Kel-Tec offers a solid product designed with American ingenuity and craftsmanship at a very competitive price. The CL-42 runs for \$85 in its two colors and the CL-43 for \$140 with its six color options. Both lights are available directly from Kel-Tec's web store. **GW**

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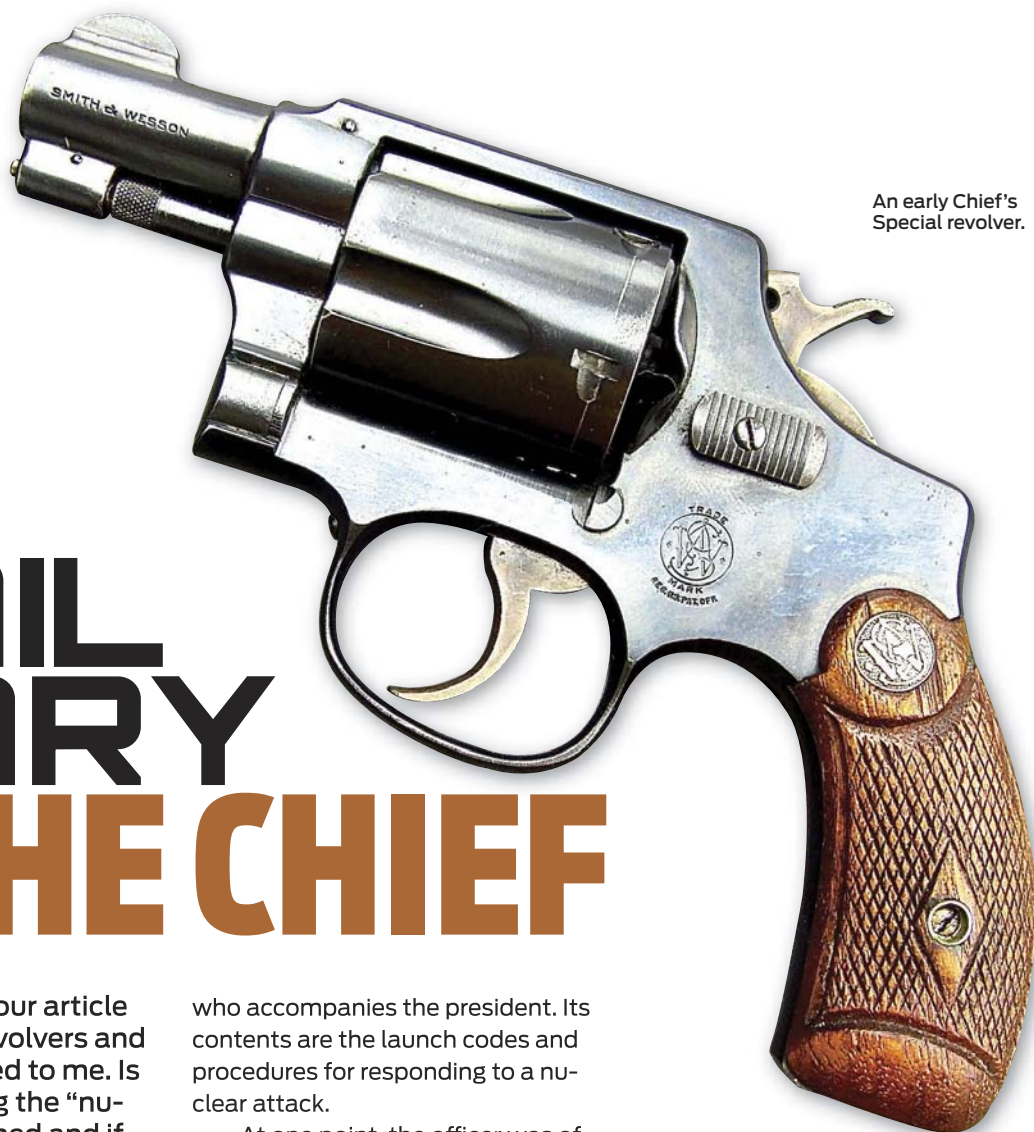
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HAIL MARY to THE CHIEF

Question: I read your article about Air Force revolvers and a question occurred to me. Is the officer carrying the “nuclear football” armed and if so with what?

Tom J., Sioux City, IA

Leroy Thompson Answers: I can give you an answer, but it won't be a definitive one.

First, just in case any readers are not familiar with the term “nuclear football,” it refers to the briefcase carried by a military officer

who accompanies the president. Its contents are the launch codes and procedures for responding to a nuclear attack.

At one point, the officer was of O4 (major) rank or above. I don't know if this is still the case, and I can't attest to the current policy of arming the officer with the football.

However, a retired Secret Service agent who served during the Reagan Administration once told me that the officer with the football carried an S&W Chief's Special revolver in an ankle holster. Presum-

ably, when revolvers were phased out this would have been replaced by an M11 automatic pistol. However, the bulkier M11 would have been more difficult to conceal, though it could readily be carried under a jacket or tunic.

Sorry, I can't be more definitive.

GW

Our September Expert:

Leroy Thompson is an internationally recognized authority on weapons and tactics, and is the author of more than 50 books.

A collage of military-themed images. In the foreground, a soldier in full combat gear, including a helmet with an American flag patch and sunglasses, holds an M4-style rifle. To his right is a large, detailed image of a machine gun. In the background, a Humvee drives through a dusty, hazy environment, with a helicopter flying above it. The scene is set against a backdrop of stylized, geometric shapes and a warm, yellowish-orange color palette.

YOUR MISSION. OUR COMMITMENT.



Light Makes Right

Text & Photos by **Mike Dickerson**

The new **Howa Alpine Mountain Rifle** weighs in at a lean, mean 5.7 pounds, shoots sub-MOA groups and is priced to give high-end, specialized light hunting rifles a run for their money.



The Alpine Mountain Rifle weighs just 5.7 pounds empty. It's chambered in .243 Win., 7 mm-08 Rem., .308 Win. and 6.5 Creedmoor.



With a well-earned reputation for delivering first-rate accuracy at a hard-to-beat-price, the Howa 1500 bolt-action rifle, which is manufactured in Japan, has a dedicated and vocal fan base among American shooters.

There was a time when that made-in-Japan label implied inferior quality, but that myth was shattered long ago, as Detroit can attest. The only real objection you might hear about the rifle today concerns its weight. Full-up versions of the basic rifle, with scopes, rings, ammo and sling, can tip the scales at nearly nine pounds. That's obviously acceptable for many hunting applications, but with the growing popularity and availability of high-end lightweight hunting rifles, many hunters now refuse to tote overweight rifles up and down steep mountains or carry them across miles of rugged, remote country.





▲ This view shows the hollowed-out bolt handle, which helps shave weight, and the three-position safety.

Now Legacy Sports International, which imports Howa barreled actions and turns them into finished rifles, gives you even more to love — or less, actually — with its new Howa Alpine Mountain Rifle, weighing in at a trim 5.7 pounds.

Howa, as a point of reference, also makes Weatherby's popular Vanguard rifles, which are essentially Howa barred actions made to Weatherby specifications. I own three different variants of this rifle, so I was anxious to see how this lightweight cousin of the Vanguard performed after spotting the slim, trim lines of the Alpine Mountain Rifle on display at the SHOT show.

Where did the weight loss come from? For starters, weight was shaved from the receiver, which was then mated to a svelte No. 1 contour, 20-inch barrel. Howa even uses a hollow bolt handle to save a couple ounces. Finally, the barreled action is paired up with a lightweight Banser High Tech fiberglass stock.

One thing I really like about the Alpine Mountain Rifle is the fact that it's offered in several configurations. The basic rifle comes with a hinged floorplate magazine.

For a few dollars more, you can get the rifle with the Ammo Boost detachable five-round magazine system installed (the rifle will ship with a traditional steel floorplate included, in matching Cerakote gray color, so you can switch back and forth, if you wish). This detachable-magazine version is available in .243 Win., 7 mm-08 Rem. and .308 Win., while a floorplate-only version is offered in 6.5 Creedmoor.

You can also purchase a complete package, including a Vortex Viper 3-9x42 scope mounted in Talley lightweight one-piece rings.

A TRUE GO-ANYWHERE RIFLE

The rifle sent for testing was decked out in the full-package configuration, with the detachable five-round polymer magazine, Vortex

Viper scope with Dead-Hold BDC reticle and Talley lightweight one-piece rings.

Unloaded, the complete rig weighs just 6.7 pounds, or roughly two pounds less than a standard Howa rifle with rings and scope. That's a noticeable difference when I'm hunting the high country, where every ounce counts.

You'll likely be surprised at just how light the rifle feels when you pick it up for the first time, but it balances well between the hands and is quick to the shoulder. As with any light rifle, solid shooting technique is required to attain maximum accuracy with a platform that can be disturbed by a stiff breeze.

Aesthetically, the rifle is easy on the eyes. The High Tech stock, in olive drab green with black speckling, has classic lines, and the buttstock sports the proven Pachmayr Decelerator recoil pad.

The barrel, action and all exterior surfaces wear a silver-gray Cerakote finish. The finish doesn't just

“Unloaded, the complete rig weighs just 6.7 pounds, or roughly two pounds less than a standard Howa rifle ...”

look good; it provides solid protection from the elements, as well as scratches, making this a true go-anywhere rifle.

Of course, there's room for debate over the relative merits of the add-ons with the rifle package.

I give a big thumbs up to the choice of Talley rings. I have used them for many years now and have had zero issues.

However, I have mixed feelings about the detachable magazine setup. I like the convenience of detachable magazines, but I don't like them to get in the way on a hunting rifle. In this case, the magazine extends pretty far below the action.

That simply takes a bit of getting used to, but you'll need to take care to avoid accidentally tripping the magazine release latch, which protrudes prominently from the front side of the magazine. It could snag if you're forcing your way through brush or branches, dropping the magazine unexpectedly. Being a bit of a traditionalist, I would probably stick with the traditional hinged magazine floorplate as a purely personal choice.

I normally mount my own scopes on rifles for testing, but in this case I used the Vortex Viper since it was already mounted on the rifle. I was unfamiliar with the

Viper scope prior to this review, but the glass had decent clarity for a scope in its price range and it performed well during my limited evaluation. Features include Extra-low dispersion (XD) glass, fully multi-coated lenses, second focal plane reticle, and shockproof, waterproof and fogproof construction.

SMOOTH-CYCLING ACTION

If your goal is to create a rifle that functions with repetitive reliability, there's a lot to be said for a simple design, as illustrated in the Alpine Mountain Rifle's operating system.

The rifle has a push-feed action with a forged, one-piece bolt with two large locking lugs. The bolt uses a standard plunger-type ejector and spring-loaded extractor. It cycled smoothly with no binding or noticeable friction, and the rifle fed, extracted and ejected without issue.

The rifle's action is pillar-bedded and secured to the stock using two action screws that have a factory recommended torque setting of 50 inch-pounds. I checked and verified that the barrel is, indeed, free-floated over its entire length.

One component of the Alpine Mountain Rifle that deserves special attention is the Howa Actuator Controlled Trigger, a two-stage design that plays a key role in helping this rifle be all it can be in terms of accuracy. Designed for enhanced safety and consistency of performance, the trigger has a very light initial take-up before meeting solid-stop resistance. It then breaks in crisp fashion, with no creep.

I did not attempt to adjust the trigger. That's partly because I wanted to duplicate a buyer's out-of-the-box experience, and partly because the trigger on our test rifle broke at a consistent pressure of 3 pounds, which is just fine for a trigger on a hunting rifle.



▲ When purchased as a package with scope and detachable magazines, the rifle comes with Talley lightweight one-piece rings, which the author has long favored for use on his own rifles.



The trigger surface is grooved for non-slip trigger finger placement. Overall, this is a pretty solid trigger for a factory rifle.

I was pleasantly surprised to find that the rifle has a three-position safety. In addition to the forward

“fire” position and the rear “safe” position, which locks the bolt, there’s a middle position that allows you to work the bolt and load or unload the rifle with the safety engaged.

The rifle’s safety lever is located atop the right rear of the receiver just behind the bolt handle, falling naturally under the shooter’s thumb. It takes firm pressure to operate, so it is unlikely to get bumped out of position accidentally.

Mechanically speaking, there’s little fault to find with the Alpine Mountain Rifle.

A SUB-MOA SHOOTER

Interestingly, Howa isn’t shy about taking a firm position on the need to perform a specific barrel break-in procedure, a subject of debate among even the finest custom barrel makers.

Howa actually provides detailed rifle break-in instructions along with the owner’s manual. The instructions recommend that you

fire 10 shots, cleaning between each shot, and then fire 10 more shots, cleaning after every second round. I quote:

“To keep temperature cool in the barrel, wait at least 5 minutes between break-in shots,” the instructions state. “The barrel must remain cool during the break-in procedure. If the barrel is allowed to heat up during break-in, it will destroy the steel’s ability to develop a home registration point, or memory. It will have a tendency to make the barrel ‘walk’ when it heats up in the future.”

▲ The Alpine Mountain Rifle can be purchased with an optional five-round detachable magazine in place of a traditional steel hinged floorplate.

SPECIFICATIONS

HOWA ALPINE MOUNTAIN RIFLE .308 WIN.

Action: Bolt action repeater

Caliber: .308 Win.

Barrel: 20-inches, No. 1 contour, Cerakoted

Stock: Banser Hi Tech synthetic

Weight: 5.7 pounds

Length: 40.25 inches

MSRP: \$1,188 (rifle only)



▲ The forged, one-piece bolt is a push-feed design, with two large locking lugs, a plunger-type ejector and a spring-loaded extractor.

For accuracy testing from the bench, I fed the rifle six different factory loads ranging from 150-grain hunting loads to 168-grain match loads. Unfortunately, weather conditions were less than ideal during the time allotted for review of the rifle. Faced with thunderstorms day after day, I had to squeeze in all testing during a rare clear day when a shifting wind (sometimes quartering, sometimes crossing) blew at a stout 15-26 mph, trending closer to the 26-mph mark for most of that time.

Should you think that's no big deal, consider the fact that a front-quartering 26-mph wind will cause a typical 150-grain .308 Win. bullet at 2,280 fps to drift some 2.35 inches off point of aim at 100 yards, while a 90-degree crossing wind of 26 mph will further increase that drift by another inch.

When you crunch all the numbers (trust me on this) the amount



▲ Fully equipped with a detachable magazine, Talley rings and Vortex scope, the Alpine Mountain rifle weighs just 6.7 pounds, or roughly two pounds less than a standard Howa rifle with scope and rings.



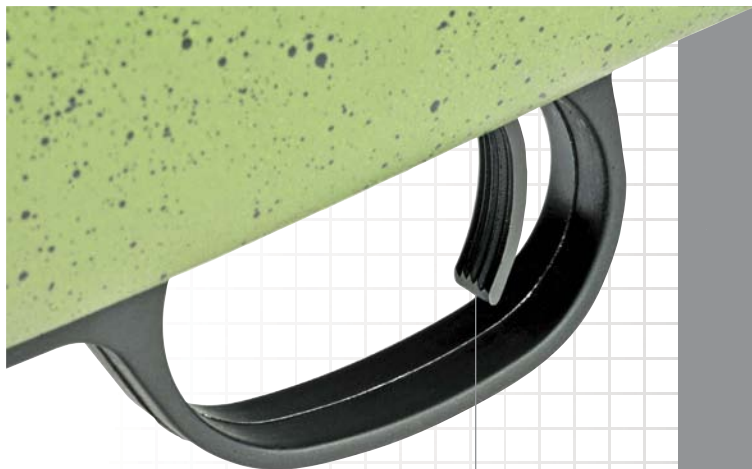
▲ All exterior metal surfaces of the rifle have a gray Cerakote finish, giving the rifle great resistance to inclement weather and scratches.

PERFORMANCE

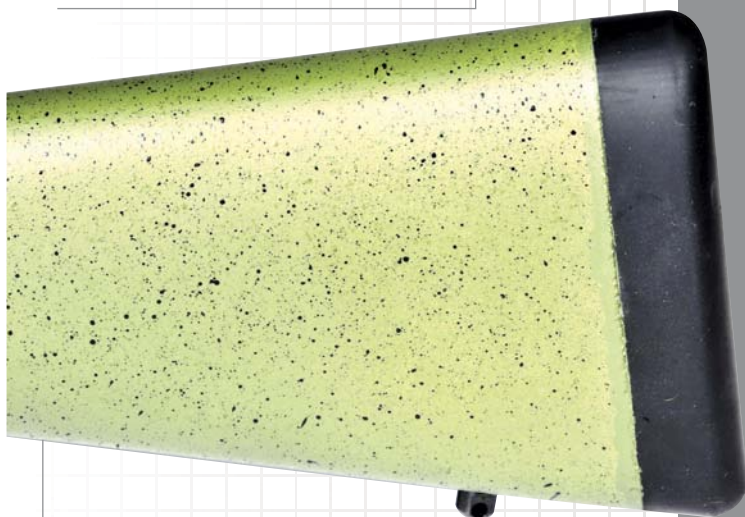
HOWA ALPINE MOUNTAIN RIFLE .308 WIN.

LOAD	AVG. MUZZLE VELOCITY (FPS)	AVG. 100-YARD GROUP (INCHES)	BEST 100-YARD GROUP (INCHES)
Barnes Vor-Tx 168-gr. Tipped TSX BT	2569	1.04	0.77
Federal Premium Gold Medal 168-gr. Matchking	2585	1.06	0.98
Hornady American Whitetail 150-gr. InterLock	2690	1.37	1.21
Hornady TAP FPD 168-gr.	2607	1.05	0.93
Winchester Deer Season XP 150-gr.	2768	0.83	0.71
Winchester Super X 150-gr. Power Point	2673	1.66	1.26

Note: Velocities measured with Competitive Edge Dynamics M2 chronograph. All groups fired in winds of 15-26 mph.



▲ The Howa Actuator Controlled Trigger is a two-stage design. The test rifle's trigger had a crisp and consistent 3-pound break.



▲ A Banser High Tech stock saves some weight in the design. It's equipped with the proven Pachmayr Decelerator recoil pad.



▲ A three-position safety allows you to load and unload the rifle with the safety engaged.

of likely wind drift at 100 yards, on the day of testing, varied from 1.35 inches to 3.35 inches. That, in other words, is a two-inch window of variability. The results of my accuracy tests, which we will get to momentarily, were impressive under such windy conditions.

I expected to see some modest falloff from factory-stated velocities out of the Alpine Mountain Rifle's 20-inch barrel, and that proved to be the case.

“The average size of the best groups from all six loads was just 0.97 inches ...”

The least variance was only 52 fps, with Winchester's new Deer Season XP (Extreme Point) polymer-tipped 150-grain load which, as you'll see, was also an accurate load. At an average velocity of 2,768 fps, it was the hottest load tested.

The greatest variance was with Winchester's Super X 150-grain power point load. That load clocked in at 2,673 fps, some 147 fps slower than factory-stated velocity, but it was still faster than any of the three 168-grain loads tested.

Among the loads with heavier bullets, the fastest proved to be Hornady's TAP FPD 168-grain personal defense load, which delivered an average velocity of 2,607 fps.

Despite having to buck the wind, the new Winchester Deer Season XP 150-grain load turned in the best single group as well as the best average groups, measuring 0.71 inches and 0.83 inches respectively. Other loads from Barnes, Federal and Hornady were not very far behind.

Even with the wind stringing groups horizontally, four of the six tested loads produced sub-MOA best groups. The average size of the best groups from all six loads was just 0.97 inches, and all but one



▲ The author put the Alpine Mountain Rifle through its paces at the bench and was impressed with the rifle's accuracy, despite windy conditions.

load turned in average groups measuring less than 1.5 inches, with most closer to the one-inch mark. Our test rifle clearly wasn't very finicky about ammo.

While I have no doubt that group sizes would tighten considerably with less wind, the rifle turned in what I consider to be an excellent performance for such a light hunting rifle — and nothing less than a stellar performance under the conditions. I've shot many factory rifles that couldn't group that well on a calm day.

If you are in the market for an easy-to-carry hunting rifle that's chambered in some solid-perform-



▲ Four of six tested factory loads produced sub-MOA groups, even in 26-mph crosswinds.

ing calibers, you should give the Alpine Mountain Rifle a look. It can easily hold its own against higher-priced, specialized light rifles, and look good in the process. **GW**

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The Oriskany Arms 1911 Tactical FP offers plenty of custom touches and hand finishing at a production gun price.



Not Just Another

1911

Text & Photos by **Steven Paul Barlow**

Oriskany Arms' 1911
pistols offer custom features
at production prices

There seems to be no end in sight for companies introducing new models of the ever-popular 1911 pistol. In most cases, these pistols fall into one of two categories: mass-produced models ranging from \$600 to \$1,000 and semi-custom, limited production models that can cost well above \$2,000.

Oriskany Arms, a small company in central New York State, is one of the newer entrants in the 1911 marketplace and they're offering a hybrid of these two choices: accurate and reliable 1911s with custom touches for under \$1,000.

This target incorporates one inch
click adjustments of most score
bags to achieve the most ac



◀ Black Oxide, two-tone and Cerakote (not shown) finishes are also available on 1911 pistols from Oriskany Arms.

I'm often skeptical when companies claim custom features at a mass-market price, but these aren't assembly-line guns cobbled together from imported parts. Everything that goes into these guns is American made. The slides are fitted to the frames by hand, as are the trigger assemblies, to ensure accuracy and reliability.

I chose the company's 1911 Tactical FP model for testing. The "FP" stands for Fermer Precision, which has been manufacturing gun parts since 1947 for companies such as Winchester and Remington. Fermer Precision and Oriskany Arms are sister companies under the Giotto Enterprises banner.

FEATURES

The pistol had a nickel boron nitride finish. Basically, it was coated twice with electrolysis nickel

plating and then coated again with a tough boron nitride, making it durable and corrosion-resistant with good lubricity.

"When we tested the finish," Oriskany Arms President Jim Rabbia told me recently, "we'd tear down the pistols after every 200 rounds to look for wear points. After about 2500 rounds through three guns, we just stopped because there was no wear."

He also mentioned that it's possible to scratch or dent the finish in hard use, but that it won't affect the integrity of the plating. It's less likely

to chip the way nickel-plated guns did years ago.

Oriskany offers this model in other finishes as well, including Cerakote, black oxide or a two-tone hybrid with a black oxide frame and stainless slide.

The skeletonized hammer, elongated thumb safety, beavertail grip safety, flat mainspring housing and polymer grips, all of which were black, offset the silver color of this finish nicely.

Trijicon night sights come standard on this model, with a rear sight that is adjustable for windage. The Tactical FP model also features a tactical rail if you want to mount lights or lasers. Two black, seven-round magazines were included with the gun.

Fermer Precision has state-of-



▶ These excellent Trijicon night sights are standard on the Oriskany Arms 1911 Tactical FP model and are optional on their other pistols.



▲ The accessory rail (above) on the Tactical FP model gives you the option of mounting a light or laser. The neck knife with Kydex sheath (center) from Timberline Knife and Tool doubles as a 1911 service tool. Besides the knife blade, it includes a flathead screwdriver, a divot for pushing pins, a push pin for trigger spring assembly removal, a 1/4-inch bit driver and a barrel bushing wrench.





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The "Tank" Scope Plumb



▲ Takedown of the Oriskany Arms pistol is like that of any other 1911.



▲ 1911 frames await finishing and assembly. Much of the work at Oriskany Arms is done by hand.



SPECIFICATIONS

1911 TACTICAL FP

Manufacturer: Oriskany Arms

Barrel: 5-inch match grade, 1:16 LH twist, 416 SS ordinance grade steel

Overall Length: 8 ¾ inches

Capacity: 7 plus 1

Sights: Trijicon Night Sights

Slide: Machined from 4140 heat-treated bar stock

Frame: Cast from 4140 heat-treated steel

Finish: Nickel Boron Nitride (tested). Also available in Cerakote and black oxide finishes.

MSRP: \$995 as tested

A GRIPPING SURVIVAL KIT

Besides their Tactical FP model, Oriskany Arms makes other 1911 pistols, including the Custom FP and the 1911 Traditional FP, the company's base model gun with black oxide finish.

Newest in the lineup is the 1911 Survivor FP. As the name suggests, there is a mini survival kit stored in a hollowed out section of the pistols grips. These grips are secured with flathead screws instead of hex screws and are removable in the field with a spent casing or the front edge of the magazine base plate.

The kit includes some of the basics for short-term survival, including strike-anywhere matches, fish hooks and line, water purification tablets, a compass, razor blade and a solar fire starter.

That fire starter consists of a concave mirror and a small metal rod on which you place your tinder material. The mirror can be used to focus sunlight and ignite the tinder or as a signal device.

"The first time we tried it, it actually scared me," said Oriskany Arms President Jim Rabbia, "because I was holding it, thinking it wasn't going to work at all. Then all of a sudden it started smoking and the tinder ignited."

The 1911 has always made a good backwoods companion, and this 1911 Survivor FP model is especially suited to that role.



▲ The mini survival kit contained inside the grips of the Survivor model includes a solar-fire-starter/signal-mirror combo, strike-anywhere matches, compass, fish hooks and line, water purification tablets and a razor blade.



▲ All 1911 slides are hand-fitted to the frames by Chris Komorek, production manager and gunsmith.

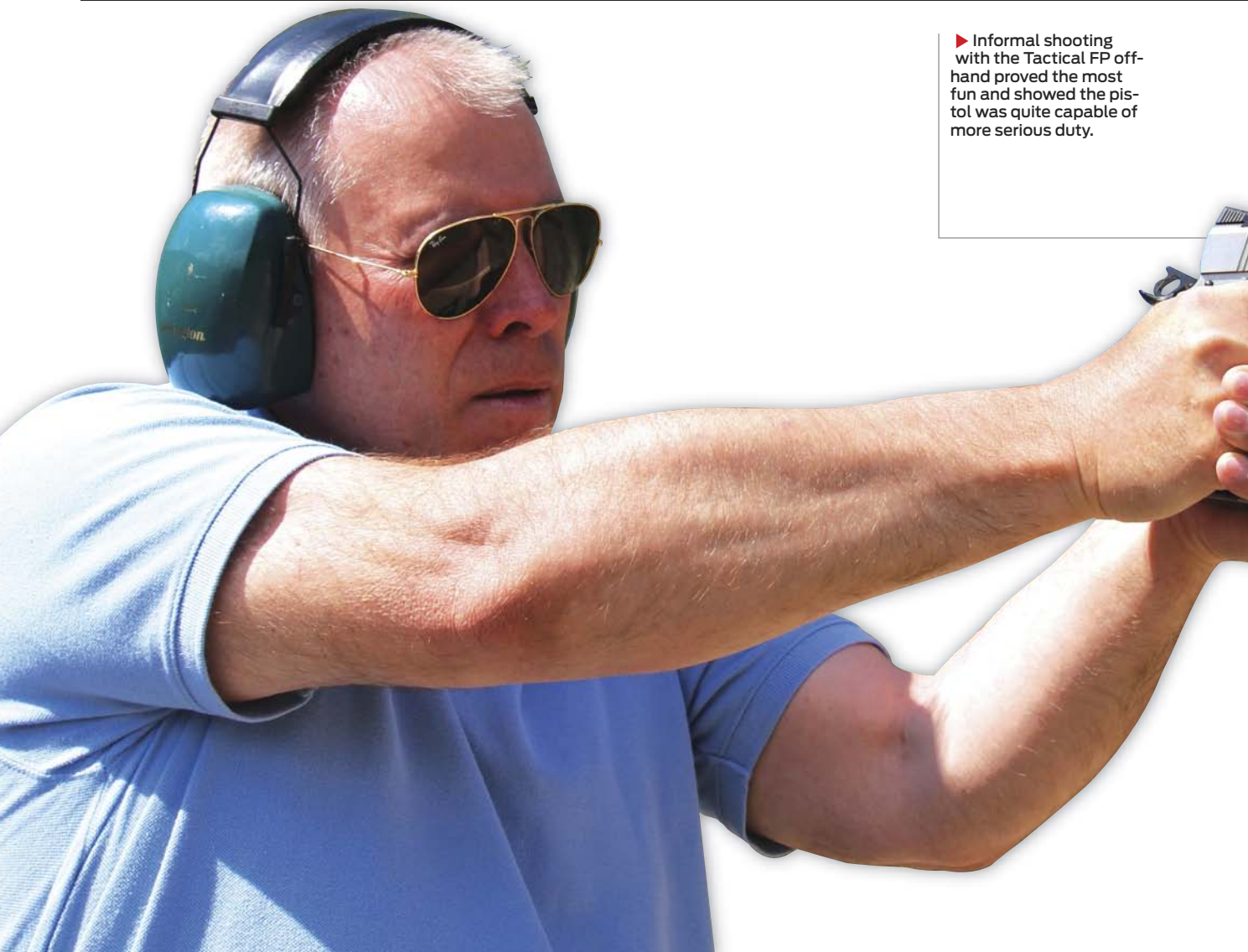
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► Informal shooting with the Tactical FP off-hand proved the most fun and showed the pistol was quite capable of more serious duty.

SHOOTING RESULTS

ORISKANY ARMS 1911 PISTOLS

AMMUNITION	VELOCITY	AVG GROUP SIZE	SMALLEST GROUP
Perfecta 230-grain FMJ	927 fps	2.12 inches	2.00 inches
Winchester (white box) 230-grain JHP	933 fps	2.18 inches	2.00 inches
Federal 230-grain FMJ	837 fps	2.35 inches	1.50 inches
Remington 230-grain MC	833 fps	2.00 inches	1.75 inches

Groups consisted of five shots at 25 yards fired from a rest. Velocity measured with Crony chronograph 8 feet from the muzzle.



▲ A small notch on top of the barrel is provided as a loaded chamber indicator.



▲ This lightweight Fobus paddle holster made carrying the large 1911 pistol very easy. The corrosion-resistant nickel boron nitride finish on the Oriskany Arms 1911 would make the pistol an excellent choice for harsh environments.

the-art CNC equipment to machine the slides from bar stock. The frames are cast and the parts are finished and assembled at the Oriskany Arms facility where the slides are meticulously fitted to the frames by hand.

“Most groups were in the 2 to 2 ¼-inch range...whether I was using domestic or inexpensive imported ammo.”

“We control our tolerances so tightly on the slide and frame that we have to hand fit them or they won’t go together,” said Rabbia.

During my visit to the Oriskany Arms facility, I met Chris Komorek, a production manager and gunsmith. It was nice to be able to shake the hand of the man who had actually built the gun I was about to test.

The company tests each gun on site, first by firing a high-pressure round through it to proof the barrel. Then, after the headspace is checked, two full magazines of factory rounds are fired through the gun to check functional reliability and to ensure that each gun shoots 2 ½-inch groups or better. If it fails on either count, it goes back to the gunsmith’s bench.



▲ Jim Rabbia, president of Oriskany Arms, examines some 1911 frames awaiting fitting and assembly.

The trigger is hand-fitted as well. It's grooved and has an over-travel set screw that can be adjusted to remove any drag after the trigger breaks. It is also Nylok sealed to prevent it from shifting on its own.

On the inside there is a Series 80-style firing pin block that adds an extra measure of safety, ensuring the firing pin can't contact the primer of a chambered round unless the trigger is pulled.

While many think such a feature is unnecessary on a 1911, it has never bothered me and it had no noticeable effect on the trigger pull. On my test gun the trigger pull was about 3 ½ lbs and it broke crisply with no creep.

SHOOTING IMPRESSIONS

The Oriskany Arms 1911 Tactical FP might be middle-of-the-road

price wise, but it performed with a high level of performance.

Because the frame-to-slide fit was so tight, I expected that the gun might need a break-in period to be fully reliable. It didn't. Throughout my testing over several range sessions, there were no malfunctions of any kind. Spent casings were ejected with authority into a pile about 10 feet away.

I tested the pistol with several brands of ammo, first shooting from the bench at 25 yards for some velocity and accuracy figures. It proved more accurate than Oriskany Arms' standard of 2 ½-inch groups. Most groups were in the 2 to 2 ¼-inch range regardless of whether I was using domestic or inexpensive imported ammo.

Naturally, the point of impact did vary slightly from one brand of ammo to the next. The best group

of 1 ½ inches was achieved with Federal 230-grain FMJ.

Despite the gun's excellent performance from the bench, the real fun for me was shooting this gun off-hand in tactical drills, transitioning from target to target. I typically finish my range sessions with some off-hand shots at a 12-inch metal plate at 100 yards, and the Oriskany Arms pistol performed even better than expected.

FINAL THOUGHTS

Like many gun writers, I prefer to test high quality guns with beneficial features and I agreed to review an Oriskany Arms 1911 because there was every indication that it would be a good gun. In the end, I was not disappointed.

It's obvious that spending the extra time creating each pistol at the factory has allowed Oriskany Arms to produce semi-custom guns with an excellent balance of accuracy and reliability.

The Tactical FP model I tested, with its hand-fitted parts, accessory rail, nickel boron nitride finish and Trijicon night sights is a good value for a very reasonable suggested price of \$995.

It's usually a safe bet to stick with the big name brands when buying a firearm. But sometimes taking a chance on an up-and-coming smaller company whose commitment is to quality over quantity rewards you, and I believe that will be the case if you choose a 1911 from Oriskany Arms. **GW**

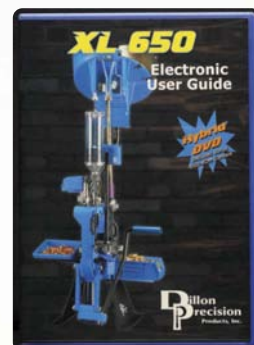
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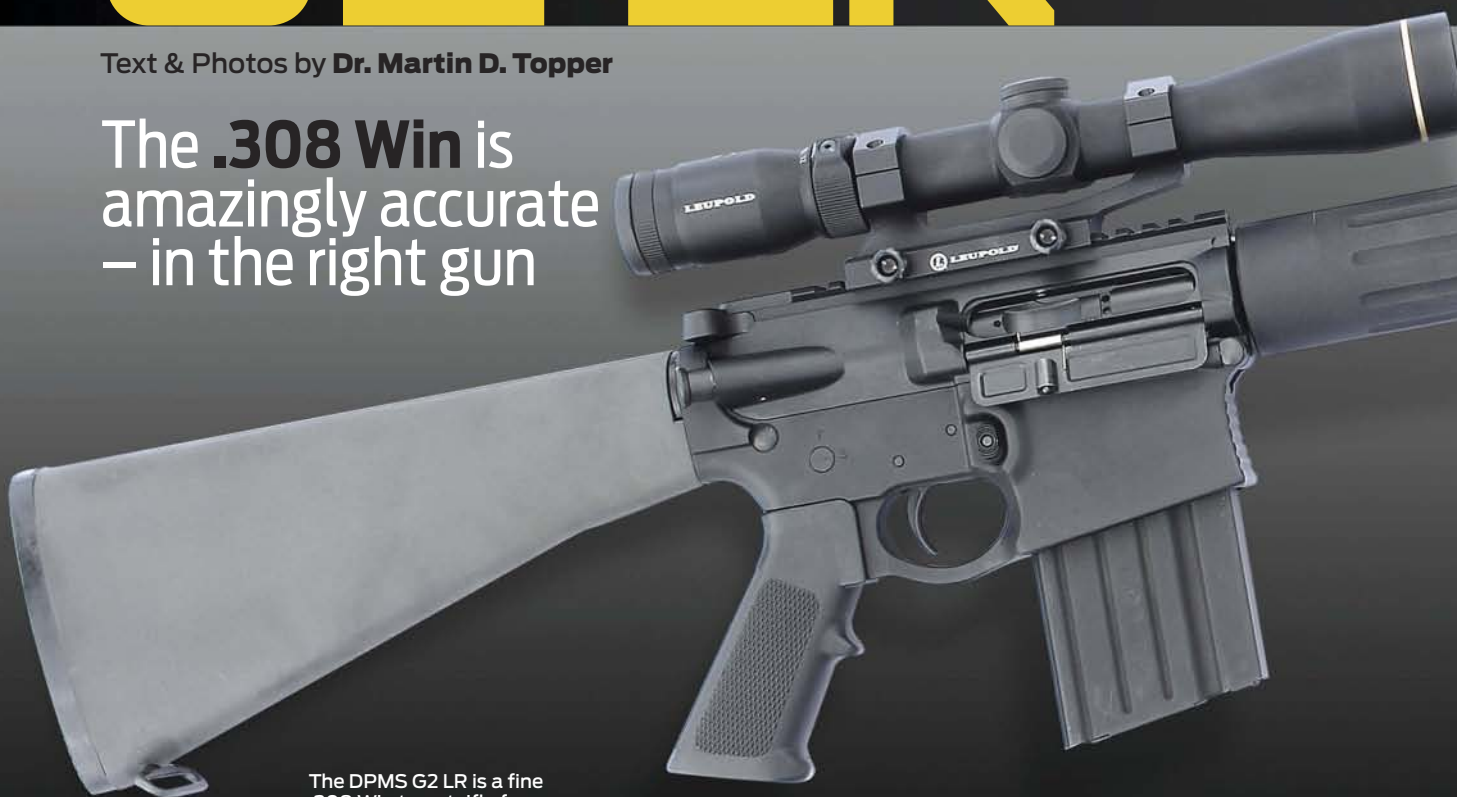
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On target with the **DPMS G2 LR**

Text & Photos by **Dr. Martin D. Topper**

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D PMS' G2 rifles are not just modified versions of Eugene Stoner's AR-10; they are the culmination of advanced manufacturing and materials technologies used to create lighter and more reliable firearms than the hi-tech AR-10s and M-16s of the mid-20th century.

The G2 series consists of six rifles that range from lightweight tactical offerings to the heavyweight Long Range (LR) model, which was tested for this article.



▲ The upper receiver has an integral top rail that proved ideal for mounting the Leupold VXR scope.

ADVANCED FEATURES

The G2's advanced features include changes to the gun's primary components. The new receiver is 0.625 inches shorter, lighter and smaller in diameter than previous .308 AR frames.

Strong and durable, the upper and lower receivers are made of forged 7075 T6 aircraft-grade aluminum, which are then level III anodized and Teflon coated.

The receiver assembly has an enlarged trigger guard, lengthened ejection port, improved shell deflector and a beveled magazine allowing for smoother and faster magazine changes.

In addition, the lower receiver

has a steel feed ramp insert that saves weight by providing a smaller barrel extension and simultaneously improves the rifle's ability to feed a variety of bullets.

Changes to the rifle's inner components include a re-shaped bolt to match the smaller barrel extension, a monolithic bolt carrier with an integral gas key tower and removable gas key extension, as well as improved trigger and hammer pins. Gone are the carrier key screws, which were potential problems and had to be firmly staked in place to prevent malfunctions.

Dual ejectors and a new extractor further improve reliability. The extractor is made of a very durable

proprietary material and the extractor spring is made of an elastomer (a highly resilient polymer).

This new spring has been tested at temperatures ranging from 60 degrees below zero to upwards of 650 degrees Fahrenheit. Not only is the spring extremely tolerant of high and low temperatures, it is also highly resistant to damage from gun oils and gun cleaners. Extraction and ejection are very positive.

THE G2 LR-308

The LR is a true target rifle, designed to deliver maximum accuracy. One of the LR's notable features, which is absent in other G2 versions, is a match grade 24-inch stainless steel bull barrel with a countersunk target crown.

The 1-inch barrel has no discernible taper at the muzzle, making the rifle feel quite muzzle heavy.

The gun's empty weight is 10 pounds, and when fully loaded with the 4-12X Leupold scope the rifle weighs close to 12 pounds. This makes it a bit heavy to shoot from the prone position without attaching a bipod to the built-in sling swivel stud in the free-floated aluminum forend. On the other hand, the rifle's somewhat hefty weight makes recoil very manageable.

SPECIFICATIONS

DPMS 62 LR (LR-308)

Barrel: 24 inches

Frame: 7075 T6 forged Aluminum with Level III Anodizing and Teflon coating

Finish: Matte Black with Brushed 416 Stainless Steel Barrel

Length: 43 inches

Rate of Twist: 1:10 inches

Weight: 10 pounds

Width: 0.94 inches

Caliber: .308 Winchester

Capacity: 20-round detachable box

Sights: None

MSRP: \$1,759

When I first saw the rifle, it was obvious to me that the LR is designed for accuracy. In addition to the bull barrel, the flattop upper receiver has an integral M-1913 style accessory rail, with another short rail atop the gas block. These rails provide solid mounting platforms for telescopic sights and high-quality target sights.

Accurate shooting is also facilitated by the rifle's fixed A2 stock. This rigid shoulder stock is finished in the same matte black as all other components of the rifle except for the barrel.

The stock is hollow and its checkered polymer buttplate has a door that provides access to a considerable amount of storage space inside.

As I checked the LR at my workbench, the exterior of the rifle showed very good workmanship. The finish on all compo-

nents was even, conformation of parts was good and there were no manufacturing defects or tool marks anywhere on the exterior of the gun. Field stripping the rifle indicated the same quality of manufacture on interior surfaces.

Once reassembled, the rifle's two-stage trigger was tested. Trigger movement was smooth, but the trigger pull was quite heavy for a target rifle, breaking very consistently at 6.25 pounds. While this did not affect the accuracy of the rifle, the trigger pull was a bit heavy for my personal taste.

LEUPOLD SCOPE

A long-range rifle needs a quality scope if its owner is to make the best use of it. Given that the maximum distance at which I was testing the rifle was 300 meters, I chose 4-12X variable power scope.

Twelve power should be adequate out to at least 500 meters for



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▲ The LR's ejection port has been lengthened and the shell deflector was redesigned to promote reliability.

tactical shooting or big game hunting, but the mirage effect becomes a problem at higher magnification, especially during hot weather. There is a great deal of heat-related mirage potential here in Florida in the summer.

The scope selected for the DPMS LR-308 is Leupold's 4-12X VXR with the new Firedot LRV reticle. The VXR was chosen because of the sharp color-true images produced by Leupold's Index Matched Lens System in which the lenses are individually coated for maximum light transmission and have blackened edges to reduce glare within the scope. Both of these advantages help significantly on bright, hot sunny days at the range.

Of course, the reticle also had a great deal to do with the selection of this scope. The Firedot LRV is a duplex design with two holdover hash marks on the bottom crosshair. Pressing a button on the left turret illuminates the holdover marks and the crosshair with bright red light – Firedots.

The dots subtend less than 0.5 MOA at 100 yards. Since the G2 LR is chambered in .308 Win, I zeroed the crosshair at 100 yards. This put the first holdover hash mark on tar-

SPECIFICATIONS

LEUPOLD VXR 4-12X40MM SCOPE WITH FIREDOT LRV RETICLE

Magnification: 4.4-11.7X

Tube Diameter: 30mm

Length: 12.5 inches

Weight: 14.6 ounces

Field of View: 10 feet @ 100 yards
(12X setting)

MSRP: \$789



▲ Leupold's 4-12X VXR scope with the new Firedot LRV reticle.



▲ The G2 LR has a forward assist like many other ARs.

get at 200 yards, and the second one zeroed the rifle at 300 yards.

This scope's crosshair is in the second focal plane, so the scope needs to be set to 12X to use the holdover feature. The system worked very well in the field. The image was very bright and sharp, and the red dots were clearly visible even in bright sunshine.

SHOTS FIRED

The G2 LR was fired for accuracy at 100 yards using bulls-eye targets. At 300 meters, PR-B21E silhouette targets from Law Enforcement Targets were used. Quartering winds were variable and gusted up to about 10 mph on both testing days. Given the gusty winds, accuracy



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▲ The author bench tested the LR with three premium loads from Black Hills and Gorilla Ammunition.

PERFORMANCE

DPMS G2 LR (LR-308)

LOAD NAME	VELOCITY	BEST 100-YD. GROUP
Black Hills 155-gr. Gold	2713 fps	1.02 inches
Black Hills 175-gr. Match	2550 fps	0.73 inches
Gorilla 175-gr.	2531 fps	0.89 inches

Five-shot groups fired at 100 yards from an MTM Front Sight rifle rest. Velocity data represents the average of five shots measured 15 feet from the muzzle with a Competition Electronics chronograph.

results reported here are more representative of field conditions than of the maximum potential of the rifle and scope.

Even with the wind, accuracy was very good with the Black Hills and Gorilla Ammunition loads topped with 175-grain Sierra MatchKing bullets. Accuracy was also quite acceptable using the Black Hills 155-grain load.

The best 100-yard five-shot group was just 0.73 inches, achieved with 175-grain Black Hills .308 Win Match loads. The best average for three targets at 100 yards was 0.94 inches, shot with the 175-grain Gorilla Ammunition loads.

Using the Black Hills 175-grain rounds, I shot two five-shot groups from the 300-meter line. All hit in the center of the target's chest, except for one flyer in the upper left

quadrant of the torso. The G2 LH is clearly an accurate rifle.

Velocity testing was conducted using a Competition Electronics chronograph. The rifle's 24-inch barrel produced good velocities with all loads.

For example, the Black Hills 175-grain load averaged 2,550 fps for five shots and its extreme variation was only 49 fps. The 175-grain Gorilla Ammunition load was close behind producing an average velocity of 2,531 fps and its variation was only 58 fps.

Clearly this rifle, the Leupold scope and the selected ammo worked very well together.

A GOOD CHOICE

Regardless of whether it's bought for competitive shooting or for a person who wants a highly ac-

curate rifle for hunting big game from a blind, the DPMS G2 Long Range rifle is sure to deliver outstanding performance.

When matched with the Leupold VXR scope, the whole package comes in at a little less than \$2600, much less than some other manufacturers' base AR platform target rifles.

Given its performance and value-added features, I would be proud to own the DPMS G2 LR-308 target rifle. **GW**

CONTACT

Black Hills Ammunition
605-348-5150
Black-Hills.com

Flagler Gun and Hunt Club
888-823-4251
FlaglerGunClub.com


Florida Gun Exchange
386-304-9499
FloridaGunExchange.com

Gorilla Ammunition
772-766-5805
GorillaAmmo.com

Leupold and Stevens
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Leupold.com

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◀ The LR's stock has a handy compartment for storing gear.

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CAT.#	DESCRIPTION	PRICE
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HI44695	Green	Pigment Based	3.75
HI44705	Brown	Pigment Based	3.75
HI44112	Gray	Dye Based	3.75
HI44115	Russett	Dye Based	3.75
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CAT.#	DESCRIPTION	SIZE	PRICE
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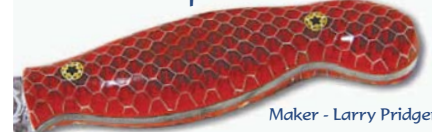
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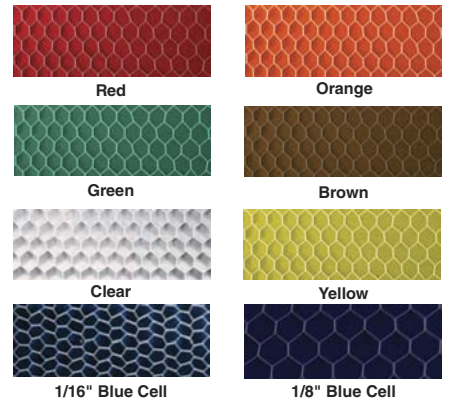


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UPSCALE


The relaxed pistol grip and rounded Prince of Wales-type knob on the Caesar Guerini Ellipse EVO provide a comfortable grip that naturally aligns the finger with the trigger. The simple bead is perfect for an upland gun, and the balance point that lies just ahead of the receiver makes this a quick-pointing grouse gun that swings smoothly.

UPLAND



Text & Photos by **Brad Fitzpatrick**

A light, durable over/under with unmistakably Italian styling, the **Caesar Guerini Ellipse EVO** is a great gun for upland hunting

 ne look at the Ellipse EVO and you'll guess that it's Italian made. Every inch of the low-profile boxlock action is overrun with beautiful engraving, and the sleek, rounded receiver and classic European design all hint at the gun's Brescian heritage. And your guess would be correct; the gun does in fact originate in the Val Trompia region of northern Italy, home to some of the world's finest shotgun makers.



with a rich, red-brown color and a great deal of dark figuring and character. It is exceptionally good wood, and the 26 LPI checkering is stylish and even. Even on the most expensive shotguns it is usually possible to find uneven checkering, but good luck finding a flaw on the EVO.

The butt plate is made of eye catching and stylish wood. This is often a

the edges and has a series of longitudinal lines cut into the wood to help the gun stay in place on the shoulder. On a field gun, a wooden plate makes sense to me. You probably aren't shooting more than a box of shells, and the slick wooden plate shoulders smoothly and won't hang up, a great benefit when snap-shooting grouse or woodcock in a thicket.

BARRELS AND TRIGGER

The barrels are also classically styled. They're richly blued and feature a solid tapered rib (8-6mm as tested) and a single silver bead, the perfect look for a traditional upland gun. All available gauges (12, 20, and 28) come with 28-inch barrels and five (C, IC, M, IM and F)

nickel-plated, flush-fitting choke tubes with very fine threads. These are prone to binding if they aren't loosened and cleaned.

The 20-gauge gun that I tested had a .626 bore diameter, and all Ellipse EVO models have chrome-lined barrels. The forend is rounded and slightly deeper than other similar guns to accommodate the Anson-style push

But even among Italian guns the Guerini is a head-turner.

The most striking feature of the Ellipse EVO is the elegant rounded action which has a hand polished coin finish, engraving by Italy's Bottega C. Giovanelli, and an Invisalloy protective finish which prevents tarnishing and corrosion. From a practical standpoint, that means the receiver finish is durable enough to survive rough handling with scratches or dings.

The engraving is rich in detail, a mix of scrolling and floral patterns that wraps around the rounded receiver, an elegant touch. The detail work is even more striking thanks to the Invisalloy coating, which not only protects the metal but also accentuates the depth and detail of the engraving. Like other fine guns hailing from the region, you can find engraving on almost every square inch of exposed metal that isn't part of the barrels, including the trigger guard and the tang.

▲ The wood-to-metal finish on the Ellipse EVO is outstanding, and the rich walnut looks great with the coin-finish receiver. Notice that the standard gun comes without a selective trigger, helping to maintain a clean, classy design. Selective triggers are available as an option, though.

FIT AND FINISH

The receiver is machined from forged steel and features two locking lugs on the monobloc that provide a secure and stable lockup. The wood-to-metal finish is superb and the rounded receiver blends perfectly with the forend for an expensive yet practical look.

The wood is hand-oiled walnut

polarizing feature on any gun; some shooters will applaud the classy look while others want a piece of good old rubber to help soften the recoil. I am not a proponent of unpleasant recoil, of course, but the push of the almost seven-pound Ellipse EVO with light 20-gauge loads was not enough to cause me any discomfort. The plate is beveled on

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▲ The Ellipse EVO is a classy Italian field gun, as beautiful as it is functional. The balance makes it an excellent upland hunting arm, and the robust design and attention to detail help ensure that the Ellipse will last for years and years.



“...The slick wooden plate shoulders smoothly and won’t hang up, a great benefit when snap-shooting grouse or woodcock in a thicket.”

SPECIFICATIONS

CAESAR GUERINI ELLIPSE EVO

Action: Boxlock Over/Under, Selective Ejectors

Gauge: 20 (tested). Also available in 12-gauge and 28-gauge

Barrels: 28 inches

Sights: Single Bead

Finish: Hand-Polished Coin Finish Receiver, Blued Barrels: Stock Walnut

Weight: 6 pounds, 10 ounces

MSRP: \$6,150, \$8,115 (two-barrel set)

▲ Every inch of the receiver and tang are treated with mechanical engraving and a corrosion-resistant Invisalloy finish that adds depth and character to the engraving. Even the monobloc has a jeweled surface.



rod release that's located under the barrel. I am a big fan of the Anson push rod design; I think it creates a smooth forearm without the Deeley divot and gives the gun a very classy look.

The Ellipse has a single inertia trigger that breaks cleanly just under five pounds (4-3/4 and 4-7/8 for the bottom and top barrels respectively). The trigger's contour perfectly mates with the lengthened pistol grip that keeps the hand at a very natural and comfortable angle. The gently sloping grip also keeps the forearm relaxed, a minor consideration for many shooters but not something that Guerini overlooked in the design of the Ellipse. That natural hand position helps keep the finger in a natural

position which, in turn, promotes good trigger pull that is aided by the Ellipse's light trigger.

It's a series of small things that add up to make the Ellipse a very easy gun to shoot well. The stock has a relatively long (14-3/4 inch) length of pull and standard Ellipse EVOs are cast for right-handed shooters (.12 at the heel, .3 at the toe). The gun comes in a high-quality locking hard case that is velvet lined.

FAST HANDLING ACCURACY

The Ellipse EVO is one of those guns that quickens an upland hunter's heart, both with its premium-grade looks and styling as well as its handling character-



▲ Doves make a hard target, but the Guerini managed to drop these three birds in succession with quick passing shots.

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▲ The 20-gauge Ellipse EVO weighs just 6 pounds, 10 ounces. The selective ejectors worked well throughout the test, and no matter whether you shoot skeet, sporting clays or grouse over pointing dogs in a northern grape thicket, the Ellipse EVO will perform well.

istics. The Ellipse EVO's round design makes it a very comfortable gun to carry in the field and it comes to the shoulder quickly and swings smoothly thanks to its balance point being ahead of the receiver. It gives the gun a slightly nose-heavy feel, promotes a smooth swing and helps "point" the gun quickly, which is critical for snap-shooting. On the patterning board I found that the gun shot very close to dead even and the groups fired using Federal 1-ounce game loads were very consistent.

Mourning dove season opened a few days after I received the Ellipse EVO, which seemed like providence to me. The 20-gauge model

that I tested weighed 6 pounds, 10 ounces, which was light enough to carry comfortably without a hefty price in recoil. A large drainage ditch bordered the dove field that I was planning to hunt, and the narrow confines of the field meant that passing doves whistled by in a rush of beating wings backlit against the September sun.

There are no easy shots here since the doves tend to use the area as a crossing point on their way to and from water, so you'd better be paying attention and be ready to shoot. The first bird was a clean miss, no fault of the Guerini but of my own inability to hit the first dove of the season. In ten months it's

easy to forget how fast those birds really are.

The second bird was not so lucky. It swung low and passed just over the treetops, travelling noticeably slower than the first bird and allowing me to swing, pass, and shoot in one smooth motion that dropped the bird out of the sky in a puff of feathers that slowly twisted down to earth.

I appreciated the Guerini's wooden butt plate even more after a few shots. There's no time for a hangup, and the smooth wooden plate jumps to the shoulder without any chance of a snag. The triggers aren't selective, so the bottom barrel fires first. Guerini clearly thought

MOUNTAIN GROUSE WITH A GUERINI

I had an opportunity to test out another of Guerini's guns, the Magnus Sporting, on mountain grouse in the peaks of the Seven Devils Mountains along the Oregon/Idaho border. Heaven's Gate operates as the sole outfitter in an area 1,200 square miles in size, steep and rugged habitat that's home to elk, moose, goats, sheep and bears. It's also home to a large population of spruce grouse, and very few hunters are willing to climb into this remote country even for the promise of good grouse hunting.

I hunted with Andy Savage, and we worked our way along the steep mountain trails with his dog Niqua in the lead. It didn't take long for her to flush a grouse that drummed down the mountain across my face. I caught the bird with the first barrel, then saw a second grouse swinging down from a higher perch and bagged that one as well.

I've been a fan of sporting guns for upland hunting so long as the cover isn't too thick and you don't mind packing the extra weight, and on that grouse hunt the 30-inch barrels made the Magnus a smooth-swinging bird gun that helped account for a limit of grouse. While lots of hunters flock to grouse coverts in the east, these mountain grouse remain largely unhunted in the mountain West.



▲ The Guerini Magnus Sporting performed admirably on mountain grouse in the Seven Devils Mountains along the Oregon/Idaho border.

“The triggers aren't selective, so the bottom barrel fires first.”



◀ Within the course of an hour at a dove field you're likely to encounter just about every challenging shot imaginable, from hard crossers to high overhead birds and quartering angles, but the Guerini performed well.



► The balance point of the Ellipse EVO is slightly ahead of the receiver, providing a smooth swing for pass-shooting doves. The light trigger and rounded design also help make the Ellipse EVO an ideal gun for upland hunting.

the classic sliding tang-mounted safety looked better without the selector, and I happen to agree.

If you simply cannot live without the option of switching from the top to bottom barrel at will you can opt to have your Ellipse EVO outfitted with a selective trigger, I personally prefer the non-selective version for a field gun. After all, there's no time to change barrels when a dove appears and you've always got the option to swap out choke tubes. The vast majority of shotgun shooters lead with the bottom barrel anyway.

Within the course of an hour at a dove field you're likely to encounter just about every challenging shot imaginable, from hard crossers to high overhead birds and quartering angles, and all of these

shots happen at Mach dove speed replete with barrel rolls and twists. If it sounds like I'm making excuses for missing, I am, but the Guerini performed well and it wasn't the fault of the gun. I hit three in a row, thought myself invincible, and then missed another two. Finally, I got back in the saddle and managed to give the Guerini a fair review. As nightfall closed in the birds came faster. I killed one straightaway and a couple crossers, finishing the evening with enough birds to cook a batch of delicious jalapeno bacon dove breasts.

At \$6,150, the EVO isn't a gun that every shooter can afford, but it is a very beautiful and reliable shotgun that is smooth to the shoulder and through the shot. It's also a show-stopper wherever it goes, an

expensive gun that's immediately recognizable as such without being gaudy. The rounded design is easy to carry and the combination of a lengthened pistol grip, excellent trigger and slightly nose-heavy balance point make this a superb upland or competition gun. The Italians have a reputation for creating beautiful machines, and the Ellipse EVO doesn't disappoint. **GW**

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The Professional rifle from Legendary Arms Works is a well-crafted winner that lives up to its ambitious name



LEGEND

There are plenty of good rifles available to the hunter today; some are well-proven classics and some are slight modifications of a classic, but few are originals. Now, there's nothing wrong with using a rifle with a familiar name or lineage, but sometimes one comes along that just simply makes sense.



Legendary Arms Works includes a padded rifle case with The Professional, a perfect addition for the travelling hunter.



▲ The fluted bolt of the Professional is a classy touch.

The Legendary Arms Works' Professional rifle makes perfect sense to me.

Legendary Arms Works (LAW) is a Pennsylvania company that brings together two great names in the firearms industry to create a one of the finest bolt-action rifles this country has seen in years.

From the instant that LAW's Paul Reed showed me this rifle at the Great American Outdoor Show in Harrisburg, Pennsylvania, I could tell that LAW had a winner. Working the action, you get a feel for the tight tolerances that bolt-action fans love so much, and the Timney trigger broke crisply at 3 ¼ pounds, with no creep and little overtravel.

I immediately asked Paul to send me a test rifle when he had one available.

"Would a .308 Winchester be ok with you, Phil?" he asked.

"Yes sir," I responded. "A .308 is

just fine by me."

To me, the .308 Winchester represents a cartridge that can do almost anything. I have used it to hunt coyotes, whitetail deer, black bears, and though I didn't get one, I have also taken it on a moose hunt. The wonderful selection of bullet weights and constructions in .30 caliber make it a perfect choice for an all-around rifle, and while it lacks the look of a long-range caliber, it has the horsepower and the accuracy to handle shots within sane hunting ranges.

KEY ACTION FEATURES

The action of the rifle is the brainchild of Ed Brown, whose 1911 pistols and rifles have been celebrated for decades, while the slick-handling synthetic stock comes from none other than Mark Bansner, gunsmith and designer of fine rifle stocks.

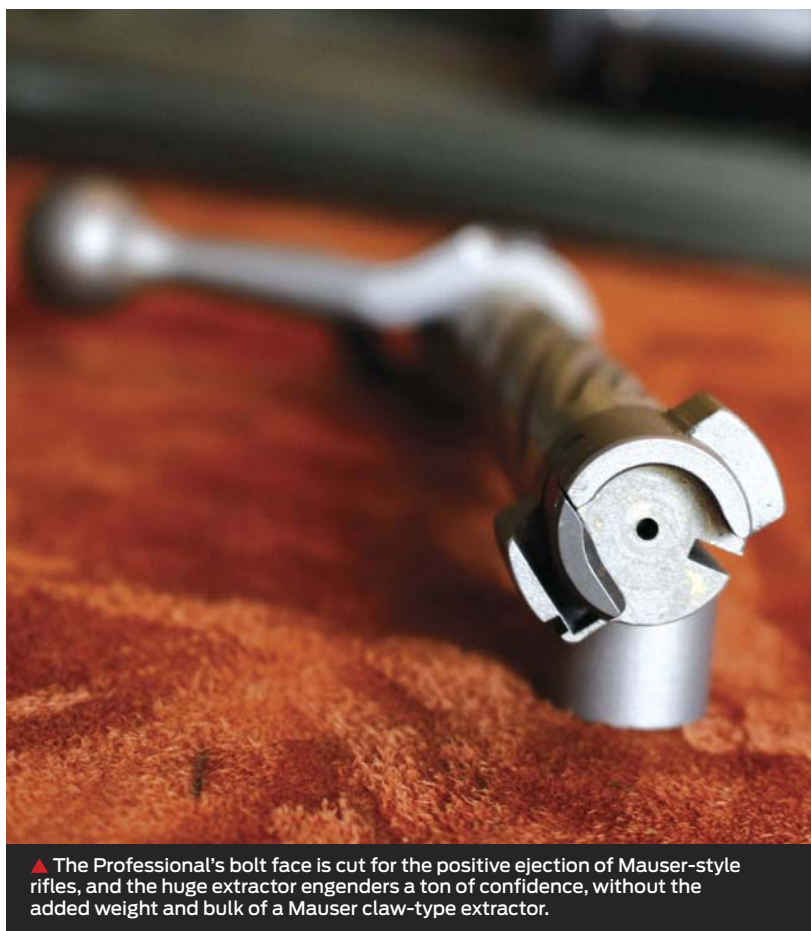
The Ed Brown Model 704 action is a CNC-machined affair, having controlled round feed, but using a very large and strong extractor on the bolt face, which engenders all kinds of confidence. The case ejector is the blade type that most classic bolt-action rifles use, and the bolt handle is straight with a slight rearward slope.

The action is aluminum block bedded into the Bansner stock for extra stability and enhanced accuracy. A lightweight aluminum trigger guard surrounds the trigger. To prevent accidentally dumping the magazine, the hinged floorplate mag release is tucked inside the trigger guard as well.

The Professional features a six-groove, match-grade 24-inch fluted barrel equipped with muzzle brake. I distinctly remembered Paul Reed telling me that LAW rifles come with a removable muzzle



▲ The Cerakoted bottom metal makes the entire rifle impervious to the elements, including my acidic hands.



▲ The Professional's bolt face is cut for the positive ejection of Mauser-style rifles, and the huge extractor engenders a ton of confidence, without the added weight and bulk of a Mauser claw-type extractor.



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▲ A three-position wing safety, along the lines of the Model 70 design, makes a good choice for safe loading and unloading of the firearm.

SPECIFICATIONS

LEGENDARY ARMS WORKS THE PROFESSIONAL

Action: Bolt action

Caliber: .308 Winchester

Stock: Synthetic

Finish: Tri-color green stock, gray Cerakoted metal

Barrel: 24-in. carbon steel, 1:10 inches right-hand twist

Sights: None furnished, Weaver-style bases included

Magazine Capacity: Three rounds, fixed

Overall Length: 44 ½ inches, with muzzle brake installed

Weight (empty): 7.3 pounds scoped, 6.8 pounds unscoped

MSRP: \$1,828.99

brake and a replacement cap for use while hunting, but by the time I received the rifle, I figured they had revised the specs to make the muzzle brake integral to the barrel.

I had the rifle for four days before I took a peek in the pouch of the padded, embroidered soft case that LAW includes with their rifles and found a threaded cap. Wait, I didn't see a seam, how do you install the cap?

Upon further inspection, using a magnifying glass, I then saw the nearly invisible seam where the muzzle brake joined the barrel, and then twisted the brake off with a turn of the wrist. The machine work on that brake is the best I've ever seen; and the option to use the brake on the bench, but remove it for hunting, is a good one.

I have tinnitus from too many years of playing in rock bands and firing rifles without ear protection, so muzzle brakes make me see stars. With the muzzle brake installed, as well as ear protection, the rifle can be accurately zeroed and handloads developed at the shooting bench. With the brake re-

moved, the recoil from the .308 Winchester is easy to manage, even for the smallest frame shooter, and your hunting friends will appreciate you removing that brake in the field as the shooter doesn't take nearly as bad a sonic beating as those next to the shooter.

STOCK NOTES

The Bansner-designed stock has a sweet curve to the pistol grip, and the comb is setup to work properly with a riflescope, placing the eye at the proper height for quick target acquisition and making the rifle's recoil very manageable.

The stock has a rounded feel, but a nice textured finish gives the shooter a good grip on the firearm, even without any checkering. The 13 ½-inch length of pull fits nicely on most people, but with light clothing, I prefer an extra ½ inch to an inch. As a test, I put on my favorite hunting coat and the gun fit like a dream.

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▲ The Professional absolutely loved Norma's Match ammunition, featuring 168-grain Sierra Match Kings.

PERFORMANCE

LEGENDARY ARMS WORKS, THE PROFESSIONAL

Load Name	Avg. Muzzle Velocity (FPS)	Avg. 3-shot 100 yd. Group (inches)	Best 100 yd. Group (inches)
Federal Vital-Shok 150-grain	2,900 fps	0.80 inches	0.65 inches
Norma TAC 168-grain	2,705 fps	0.75 inches	0.70 inches
ABM Mission Ready 155.5-grain	2,980 fps	1.05 inches	0.85 inches
Massaro Ballistic Laboratories 165-grain Sierra GK	2,650 fps	0.75 inches	0.60 inches

Velocities measured with Oehler Model 35P chronograph, 5 yards from muzzle



▲ If the muzzle brake isn't your cup of tea, it can be replaced with the cap supplied by LAW.



▲ The 704 action is a solid design, and the operation of the bolt feels very smooth.

Weaver-style bases already attached to the receiver, I used a set of Weaver Lever-Lok rings and screwed an old favorite riflescope of mine to them: A Bushnell "High-Contrast" 3-9x40mm. The scope is so clear that it earned the household title of "The Best Cheap Scope There Ever Was." It has been on many different rimfire and center-fire rifles, and has always held zero and taken adjustment well.

RANGE TIME

The Professional showed good promise at the bench. I grabbed quantities of match grade factory

ammunition, handfuls of hunting ammo that I knew worked for me in the past, and some of my own handloads that I've relied on for decades.

Setting up the Oehler Model 35P chronograph, and smiling because the winds were calm, I set forth to burn powder and punch paper. The Norma Match ammunition, featuring the industry-standard 168-grain Sierra Match King, printed three shots in a $\frac{3}{4}$ -inch group at an average velocity of 2,705 fps. No huge surprise there, as Norma's reputation is impeccable,

and the .308 Winchester and the 168-grain Match King go together like peanut butter and jelly.

ABM ammo, loaded with the 155.5-grain Fullbore hollowpoint bullet, shot just under MOA with velocities running just shy of the advertised 3,000 fps.

"The Professional is the kind of rifle that you want to spend time with once you pick it up."

Federal's Power-Shok ammunition was next on the menu, and it was this load, among the factory hunting ammo, that The Professional liked best. Three-shot groups averaged a whisker over $\frac{3}{4}$ inches, and the Oehler indicated that the velocities were 2,920 fps, higher



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▲ The author gives the LAW Professional a workout from the bench.

than the advertised velocities. For deer, antelope, coyotes and feral hogs, this load would work well, especially if the shots were on the long side so the bullet could slow down a bit.

With handloads, the LAW rifle came into its own, insofar as it liked several proven loads and showed a very consistent velocity as well as consistent accuracy.

For years, I hunted with nothing but a .308 Winchester (a Ruger Model 77 Mark II). I've spent all kinds of time developing loads for this caliber, using all sorts of bullets, from 125-grain Nosler Ballistic Tips, to 150-grain Speer Grand Slams, to 165-grain Sierra Game King hollowpoint boat tails, up to 180-grain Swift Scirocco IIs and even 200-grain Nosler Partitions for moose and other heavyweights.

Invariably, I have found that the .308 Winchester loves 150 and 165-

grain bullets; there is some mystical balance of powder capacity to bullet conformation that just plain works. I dug out some of my favorite handloads and let 'em fly.

The handloaded 165-grain Sierra Game King hollowpoint boat tails worked out very well. This particular bullet is designed to mimic the accuracy of Sierra's flagship bullet: the aforementioned 168-grain Match King. There is a very significant difference here, though.

The Game King bullet is designed as a hunting bullet and has a very thick jacket. Even though it's a hollowpoint boat tail bullet, it will stand up to magnum velocities and still give fantastic expansion and



▲ Norma TAC Match Ammo shot very well.

reliable penetration. I've loaded this bullet in three different .308s, a couple of '06s, and a .300 Winchester Magnum, all cleanly taking deer-sized game animals.

The Game Kings printed three-

shot groups that measured less than $\frac{3}{4}$ inches, at a velocity that averaged 2,655 fps. For me, this load would suffice for most of the world's game animals, up to and including bear and elk. The bullets have been consistent for years, from lot to lot, and have never let me down provided that I put the bullet where it belonged.

If I had to find a fault with the rifle, it was that some of the factory ammunition, like the ABM stuff loaded with the fantastic Berger bullets, is too long to function properly through The Professional's magazine. That aside, I like this rifle.

The Professional is the kind of rifle that you want to spend time with once you pick it up. The Professional is also the kind of rifle that makes me want to book a hunt just to match the gun. Before installing the scope The Professional weighs a mere 6.7 pounds; depending on your choice of optics I could easily

say that it shouldn't exceed 7 $\frac{1}{2}$ pounds, and the fact that the Bansner stock makes it so comfortable to carry actually reduces the perceived weight of the package.

I could easily see this gun on a caribou hunt in Alaska, where you don't need to carry a cannon in order to take your intended game animal, but need something big enough to dig yourself out of trouble should the situation arise. I could also see this rifle being carried in the steep mountains of the Northeast, be it in the Green Mountains of Vermont or the Adirondacks of my native New York.

The Professional perfectly represents the things I look for in an all-around hunting rifle. I like a good, rigid action, capable of giving fine accuracy. I like a setup that is impervious to weather, be it sub-zero or blistering hot, pouring rain or arid. The Professional has what it takes to win. **GW**

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There is no substitute for actual range firing. Even when a boresight is used the shooter must always fine-tune the sight settings by actual live-fire practice.

A GOOD SIGHT BETTER

Text & Photos by **Thomas C. Tabor**

Boresights come in a variety of styles, but used properly, each can help get you one step closer to success.

A close-up photograph of a rifle barrel, likely a .308 Winchester, resting on a stack of white sandbags. The sandbags have red lettering, including the word "SAND" and "ST". The rifle is positioned horizontally, pointing towards the right. The background is a blurred, open field under a clear sky.

Many factors affect whether or not a hunter will be successful in the field, but if you don't have your firearms sighted-in properly before heading out — and while on the hunt — there is a very good chance it will affect your success in the wrong way. In other words, if you take a cavalier attitude on where your bullets will impact, you shouldn't expect anything more than disappointing results.

However, using available technology a wide variety of boresights will help you get your rifle sighted-in properly, and the process will make your favorite sights and scopes even better.



▲ Boresights come in a wide variety of styles and types.

THE SIGHTING-IN PROCESS

Boresights can provide a valuable service to a hunter. The most commonly recognized use is to help you get your first bullets out of the barrel and somewhere on a target. Of course, no one should consider boresighting to be a substitute for actual live-fire shooting. On the contrary, boresighting must only be considered the first step in the sighting-in process.

While boresighting may allow you to hit a 55-gallon drum at fifty yards, that degree of shooting precision has no place in the world of hunting. I have personally boresighted several hundred rifles over the years and I can't think of a single instance when I was completely satisfied with those results.

In virtually every case I wound up having to fine-tune the reticles



▲ Most scopes will provide some indication of how much movement a click of the reticle adjustment dial produces, but those adjustments should be verified through live-fire shooting.



▲ Arbor mounted screen units like this Simmons model are possibly the oldest style of boresight, but they still provide a great service to many shooters.

of the scope, and in some cases that “fine-tuning” amounted to moving the bullet impact point up to a full foot or more at 100 yards. Nevertheless, the process did what it was intended to do, and that was to get my first shots on paper so I didn't waste a lot of ammo.

All boresights work on the concept of aligning the sights of the firearm to the axis of the barrel, but the process is never quite that simple. The fact is that all barrels, ammunition and bullet types vary, and those differences will definitely affect how the bullet leaves the barrel and the course that it takes to the intended target.

So once the boresighting process has been completed, you must progress to actual live-fire shooting to ensure that when it comes time to squeeze that trigger in the field the bullet will be going precisely to its targeted area.

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▲ Once you have used your boresight to get your first shots on paper you can fine-tune those settings so your bullets are impacting precisely in the right spot. In this case, Tom wanted his bullets impacting about 2 inches high at 100-yards.

AN ALTERNATIVE USE

Outside of the initial sighting-in process, there is another use for a boresight that can be even more advantageous to a hunter. If you have your own boresight and carry it with you in the field while hunting, you can quickly and easily verify that your sight alignments haven't changed.

It's happened to all of us...your rifle or scope may have been bumped or jarred, adversely affecting the reticle settings. In this case a boresight can be used virtually anywhere or anytime to recheck that alignment without the need for a single shot.

To use a boresight after your rifle has been properly sighted-in, you must make an accurate physical record of how your most recent boresight reading corresponds to the actual impact point of your bullets. That record can then be carried with you to be used as a reference tool to verify whether or not any changes have occurred to your sight settings. This is a great way to put your mind at ease whenever you suspect something may have occurred affecting the status of those adjustments.

“...there is another use for a boresight that can be even more advantageous to a hunter.”

LASER BORESIGHTS

I've found that most laser boresights are fairly easy to use, but like many lasers they don't always function well under bright light conditions. To increase the visibility of the laser dot some manufactures include (or offer as an accessory) a light reflective target. But, while these targets do help to intensify the image of the dot, lasers are still best used under subdued light conditions, and sometimes that can pose a problem for someone who wishes to use it in the field to verify or adjust the reticle settings.

There are two primary types of laser boresights: muzzle mounted and chamber fed. On muzzle mounted units, the arbor must be properly sized so it can fit a particular bore diameter. That might be accomplished either through precisely sized arbor studs that match the diameter of the bore, or in at least one case rubber O-rings are used to assist in centering the arbor to the bore.

The chamber fed units tend to be cartridge specific, but in a few cases they may function in a couple of different calibers if the calibers in question possess enough similarities.

With either style unit, once the laser is turned on the user simply peers through the scope and adjusts the reticles to correspond to the projected laser dot.

Also, remember that lasers are battery powered, so it's always a good idea to have a spare set (and make sure you have the right ones) readily at hand in the field just in case the unexpected happens.

ARBOR SCREEN MODELS

This type of boresight has been around the longest. It operates on the concept of placing an arbor that

matches the bore diameter inside the muzzle of the barrel which has a screen viewer attached. When you look through the scope you see a grid pattern, and the user adjusts the reticles of the scope to match the grid on the screen. Like the muzzle mounted laser models, the arbor must match the diameter of the bore.

MAGNETIC UNITS

Magnetic style boresights operate on the concept that the crown of the barrel is at a perfect right angle to the axis of the bore. To use this style of unit you simply turn on the battery power, attach the unit to the muzzle in an upright position, peer through the scope and adjust the reticles to match the display.

This design is possibly the easiest of all the boresights to use, but may offer the least degree of accuracy. Nevertheless, boresighting isn't an exact science, and when



▲ The author owns and uses a variety of boresights to help keep his rifles sighted-in.

A SLIGHT CAUTION

There certainly is no shortage of choices when it comes to boresight styles to select from, and more seem to be appearing on the market all the time. Those include laser units (both muzzle mounted and chamber fed designs), magnetic muzzle mounted systems, conventional screen designs and various combinations of each of these. Every style comes with its own pros and cons.

Some lasers, as well as some conventional screen units, are equipped with a metal stud that must be inserted directly into the muzzle of the firearm. I am always a little apprehensive when it comes to placing anything with a hard surface inside the muzzle for fear of doing damage to the rifling or the crown of the barrel. These fears are perhaps unjustified, but I still recommend that you take extreme care to protect this vital portion of your gun barrel not just while boresighting, but at all times.

Damage to this area of your barrel will definitely diminish your shooting accuracy.

used for sighting-in purposes you are simply trying to get your first shots on paper.


Because of the compact size and ease of use, this style is one of my personal favorites. When used for verification in the field, the magnetic units are just as accurate as any of the other boresight designs and might even be a little more precise than even the lasers.

FINAL WORDS

Even if you are a one-rifle shooter that seldom has a need to remove the scope from your rifle, a boresight can verify your scope's settings in the field without the need of alerting the game by shooting.


But whether you never use more than one rifle, or use several throughout the many seasons, boresights should be considered one more technological tool to help improve your hunting experience. **GW**

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What is the difference between these .38
Specials? The difference is about 150 fps
in velocity and a factor of 10 in accuracy.



REVOLVER BARREL LENGTHS VS. VELOCITIES

Text & Photos by **James E. House**

Your results may vary ...

It may be because I've done scientific research for so many years, but little things about how experiments are conducted attract my attention.

When it comes to load data, I believe the companies that produce the compilations of data are entirely truthful. However, there are so many variables that the velocity produced by a particular load in one's own firearm may vary greatly from a value shown in a table.

INDUSTRY PROTOCOLS

Some manufacturers' data are obtained by using actual firearms for testing, whereas other companies' loads are developed using a universal receiver to which barrels of various calibers and lengths are attached.

Pressures and velocities usually run higher when test barrels are used. These universal receiver fixtures usually have chamber and bore dimensions that are specified by the Sporting Arms and Am-

munition Manufacturers Institute (SAAMI). Such dimensions are normally somewhat smaller than in a sporting firearm that has larger bore and chamber measurements in order to accept different brands of ammunition.

Except for some magnums, most sporting rifles have 22-inch barrels. Even if a universal receiver and special test barrel are used, the barrel usually measures only 24 inches in length so velocities should be at least comparable.

I once tested in my rifle several loads prepared by technicians at one of the major loading companies and we compared measured velocities. My 22-inch barrel rifle averaged about 200 fps lower than did the company test equipment that consisted of a universal receiver and a 24-inch barrel.

Clearly, there is a greater difference than that caused by only a 2-inch difference in barrel length, and this is where the universal receiver's tighter clearances enter the equation.

One should not expect to duplicate velocities that have not been obtained using the same type of firearm.

“The data show clearly that short barrels give substantially lower velocities...”



▲ With a barrel length of three inches, adjustable sights and target trigger, this S&W Model 60 is accurate, yet small enough for discreet carry.



▲ Speer Gold Dot bullets are designed to optimize performance in short barrels.

PERFORMANCE

EFFECT OF BARREL LENGTH ON VELOCITY FOR .38 SPECIAL LOADS

BULLET	CHARGE AND POWDER	BARREL LENGTH			
		2"	3"	4"	6"
125 gr Speer HP	5.2 gr IMR SR4756	742	758	889	895
158 gr Cast SWC	4.6 gr IMR SR4756	711	721	801	857
110 gr Hornady XTP	5.8 gr AutoComp	778	833	946	998
125 gr HSM plated HP	4.6 gr Win. 231	748	771	886	889
158 gr Cast RN	4.5 gr CFE Pistol	713	783	837	851

These loads were safe and reliable in the author's handguns, but neither the author nor the publisher accepts any responsibility for their preparation and use by others. These loads should be approached with caution.

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▲ One of the advantages of a .38 Special with a longer barrel is the ability to mount a scope.

VARIATIONS ON A THEME

The situation is the same with handguns, and bullet velocities from revolvers almost defy comparison. In developing .38 Special loads for the Eighth Edition of the Hornady Handbook of Cartridge Reloading, a Smith & Wesson Model 15 with a 4-inch barrel was used. A 6-inch S&W Model 14 was the test gun for loads appearing in the 14th Edition of the Speer Handbook. Another popular reloading manual shows loads developed in a 7.7-inch test barrel.

The situation is better, but by no means perfect, in the case of autoloaders because so many of them have 4 to 5-inch barrels.

So what velocity does a .38 Special with a 2-inch barrel give and how does it relate to published data with a different type of gun? Speer has partially addressed that question by showing velocities for some loads that utilize their Gold Dot Short Barrel (GDSB) bullets in both 6-inch and 2-inch barrels.

Although this kind of data is valuable, it still leaves a lot of questions unanswered.

METHODICAL APPROACH

My wife and I have tested a considerable number of loads in various combinations of guns, especially those that have 3-inch and 4-inch barrels. Although we have determined how some loads perform in those two guns, a more systematic study of this issue was needed.

For this study, the revolvers utilized were a Taurus 85UL (2-inch), S&W Model 60 (3-inch), S&W Model 15 (4-inch) and an S&W Model 14 (6-inch).

The cylinders of revolvers have five or six chambers that may have slightly different dimensions and throat diameters, plus the cylinder-to-barrel gap differs from gun to gun. As a result, any study of this type will yield data for the specific guns used, but overall, the effect of barrel length on velocity is evident.

Projectile velocities were meas-

ured at 10 feet from the muzzle; the results obtained and load parameters are shown in the accompanying table.

Considering the variations that can occur in individual chambers in a revolver and the relatively wide range of barrel to cylinder gaps, it's not surprising that there is no simple relationship between barrel length and

“One should not expect to duplicate velocities that have not been obtained using the same type of firearm.”

velocity for the same load.

The data show clearly that short barrels give substantially lower velocities, and there is approximately 150 fps difference between the 2-inch and 6-inch barrels in most cases.

In addition, there is a significant difference between the velocity given by the 3-inch barrel of the S&W Model 60 and the 4-inch barrel of the S&W Model 15.

My Model 15 is a very tight gun with a cylinder to barrel gap of only 0.003 inches and very tight throats in the chambers. Therefore, there was no great surprise when the results from the 3-inch and 4-inch barreled guns were compared.

As has been verified previously numerous times with other loads, my 4-inch S&W Model 15's velocities do not differ greatly from speeds obtained with my 6-inch Model 14. The minimum internal dimensions of the Model 15 almost make up for the difference in barrel length.

Velocities given by a 2-inch barrel and a 6-inch barrel vary, depending on the load. The difference is roughly 140 fps with the two loads using 158-grain lead bullets.

The two loads that used 125-grain bullets produced a velocity difference of approximately 150 fps. However, the difference in velocity was about 220 fps with the load that used a lighter, 110-grain Hornady XTP bullet.

INTERESTING OUTCOMES

The results show that internal clearances and barrel length affect bullet velocity from a revolver, and

that the effect of barrel length on velocity varies with the load. All of these factors need to be considered when one prepares ammunition for a variety of guns.

It's never a simple situation and only by actually testing each load will the shooter know for sure how a specific load will perform in a specific gun.

That's part of what makes handloading so fascinating. **GW**

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The Self-Defense

Text & Photos by **Dave Workman**

7

Workman reveals the greatest ... and weakest S-D rounds



The Top Seven self-defense calibers, from left: .327 Federal Magnum, .38 Special +P, 9mm, .357 SIG, .357 Magnum, .40 S&W and .45 ACP.

Hardly a month goes by that someone doesn't ask me or make an inquiry on one of the Internet firearms forums about "the best" self-defense caliber. The simple truth is that there isn't a definitive "best" self-defense cartridge — or gun, for that matter.





▲ Ruger's popular LCR in .38 Special will handle +P loads.

"The muzzle blast alone from a short-barreled revolver is enough to scare the hell out of anybody ..."

REAL LIFE

The best caliber is the one you happen to have when you need a gun. People have walked away from gunfights armed with no more than a .22-caliber revolver, though I wouldn't recommend that as the first choice for armed combat.

At the other end of the spectrum are the people who overcompensate for self-image issues, packing around a snubby chambered for some behemoth bear-slammer in .460 S&W or .480 Ruger. There really can be too much of a good thing.

The defensive sidearm must be accurate, easy to shoot and comfortable to carry. If somebody doesn't like their personal handgun, they're less likely to have it when they need it.

A handgun does you no good at all if you're in the middle of an emergency and the gun is back at the house.

Real world defensive cartridge considerations include stopping power and firepower (they're two

different things), penetration, availability of ammunition and guns for each caliber.

DAVE'S LUCKY SEVEN

In my opinion, there are seven front-running choices and they are all worthy. Heck, I frequently carry guns chambered for at least three of the top ones, and on the trail it's a good bet that I'm carrying one or the other of the also-rans.

Without further delay, I present my recommendations. Feel free to disagree, if you must.

.327 FEDERAL MAGNUM

Starting from the smallest caliber, the .327 Federal Magnum is a serious-business choice, and it's chambered in a fine revolver, the Ruger SP101, recently updated and re-introduced with an adjustable rear sight and improved grip.

The cartridge is a sizzler, launching a 100-grain bullet at up to 1,400 fps or a 115-grain up to 1,300 fps. Recoil is easily manageable, and the round is accurate. I've



hit tin cans at 25 yards or more, and one can hit a man-sized target easily beyond 50 yards.

Close-up, where most gunfights occur, that little .32-caliber bullet is going to ruin somebody's whole day, and against mongrel dogs, coyotes and other predators, it will bite them before they bite you.

9MM

The 9mm with a 124-grain JHP comes next in my book. There are dozens of guns chambered in 9mm, which is likely to become more popular since its re-adoption by the FBI. Handguns for this caliber come in all sizes, from compacts to full-size duty models.

I think that this round has benefited greatly from continual bullet and propellant development. It is easily controlled by just about any handgunner, and overall it has proven itself effective in documented armed encounters.

.38 SPECIAL

The venerable .38 Special definitely belongs in this category, and I specifically recommend +P loads for serious use. I have carried at least three different defensive handguns over the years chambered for the .38 Special, loaded with either 125-grain JHP or 158-grain lead hollowpoint ammunition.

In a reliable handgun, the .38 Special +P is a formidable cartridge quite capable of stopping bad guys in their tracks.

.357 MAGNUM

The .357 Magnum is a caliber I've relied on for years, both for defensive carry and on the trail. The muzzle blast alone from a short-barreled revolver is enough to scare the hell out of anybody, and the round — particularly a 125-grain JHP — hits like the proverbial hammer.

There have been cases of over-penetration, but stopping power,

ammunition selection, the ability to use .38 Special rounds, and the multitudes of .357 Magnum handguns make this one a very attractive caliber. On the trail, I load up with handloads pushing 158- or 180-grain bullets propelled by healthy doses of H110.

.357 SIG

The .357 SIG gives magnum velocity to a short, necked semi-auto load that has become the choice of some law enforcement agencies and many armed private citizens. Developed to match the .357 Magnum in performance, the .357 SIG impressed me in any gun I've fired in that caliber. It's accurate, feeds reliably, and I think it has a great future in the defensive handgun arena.

Federal Premium offers a 125-grain JHP that delivers 568 foot-pounds of energy and clocks in at an impressive 1,430 fps. Underwood offers a load that's topped by

A few years ago, Workman tested this Ruger SP101 in .327 Federal Magnum, and he found both gun and ammunition to be good choices for defensive use.

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▲ Workman likes the .45 ACP and his normal carry gun is this Lightweight Commander.



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Sturm, Ruger & Co., Inc.

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Ruger.com

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800-821-5783

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a 125-grain Gold Dot bullet clocking a reported 1,505 fps with 605 foot-pounds of energy that I haven't had the opportunity to try, but it's definitely on the list.

.40 S&W

Recently, some people have started shoveling dirt on the .40 S&W, which seems in my book to be somewhere just this side of stupid. It's a dandy round, despite its sharp recoil, but it is hard-hitting and accurate.

I do not care for revolvers chambered in .40 S&W. It's a semi-automatic cartridge and it belongs in a semi-automatic pistol to achieve its full potential.

Ammunition with a variety of bullet weights is available from all the big ammo companies, and Magtech produces a 155-grain round with an impressive 500 foot-pounds of energy and a reported muzzle velocity of 1,205 fps.

.45 ACP

Last and certainly not least is the legendary .45 ACP. It has fought in two world wars and a lot of smaller actions, served well on the street for generations, and stopped black bears and at least one grizzly I know about.

In the Model 1911 — the pistol for which it was designed — it is very bad news in the hands of

someone who knows how to use it.

I carry a .45 ACP almost every day, and have loaded thousands of rounds for competition and practice. Even with 230-grain hardball, the .45 is a devastatingly effective defensive cartridge.

For the street, I load up with either a 185- or 230-grain JHP, and I can consistently hit tin cans and other small targets; a testament to the round's accuracy.

RUNNERS-UP

.44 SPECIAL & .45 COLT

The problem with revolvers chambered in either .44 Special or .45 Colt is the size of available guns. With the exception of the Charter Arms Bulldog and a snubby from Taurus, most handguns in either caliber are too big for realistic concealed carry.

If you have a six-gun in either caliber and you're comfy with it, stick with it. These old-timers have plenty of spunk, and with the right bullets and propellants they can still save the day. I would not be fearful walking down a dark alley with a handgun chambered in either caliber.

.32 H&R MAGNUM

Let's not overlook the .32 H&R Magnum. Now overshadowed by the .327 Federal, the .32 H&R is a nasty surprise at close range for

elements of evil, and it has decent ballistics with modern ammunition. As a backup gun, the .32 H&R in a pocket or ankle holster could be the perfect accessory for the well-dressed un-victim.

QUESTIONABLES

.41 Magnum, .44 Magnum & 10mm Auto ... and more

While I am a noted devotee of the .41 Magnum, and admit to having carried an N-frame S&W Model 57 in a shoulder holster on occasion, this is a load better suited to hunting and silhouette competition. Because I live in bear country, I carry one on the trail occasionally, and even killed a couple of deer with it.

But it has stout recoil that a lot of people can't handle and there's that over-penetration problem, same as the .44 Magnum. Both rounds are superbly accurate, and as defensive loads, both the .41 and .44 Magnums will definitely do the

job, as will the 10mm Auto.

However, nasty recoil discourages practice, and in an urban setting, justifiable self-defense could become mayhem in the hands of a Dirty Harry would-be amateur. A bullet that misses the intended target always hits something else, and in these three calibers, it's going to inflict severe damage.

I've run across a handful of people who carry the big boomers: .460 or .500 S&W, .480 Ruger and even .454 Casull for personal protection. These are all definitely hunting and bear-country defensive rounds, and they are well designed for their intended purpose. Way too much gun for the urban jungle, in my opinion.

PETITES SECTION

At the low end of the spectrum, the .22 long Rifle, .22 Magnum, .25 ACP, .32 ACP and .380 ACP all have histories, and in an emergency any

of these smaller options is better than no gun at all. Ammunition developments over the years have improved all of these rounds, and some of them are impressive.

However, none would be on my list of first choices, though in the hands of a competent shooter I'd give the .380 ACP and .22 Magnum decent billing, followed by the .32 ACP, the .22 Long Rifle and finally the .25 ACP.

For summer carry, I sometimes yard out my vintage Beretta Model 70 in .32 ACP. It's reliable and feeds all the JHPs I can run through it.

There are very good guns chambered for the .380, .32 and .22 Magnum, and I'm happy with the tiny revolvers from North American Arms in .22 Long Rifle that are carried in pockets and purses.

Again, none of these little calibers is on the A-List, and when my life is at stake, I want the most reliable gun/caliber combo available ... wouldn't you? **GW**

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PROJECT 1911

Text & Photos by **Steve Sieberts**

Part Five: Front & rear sight replacement and a custom Ceracote finish



Earlier this year, we worked through a four-part series on how to build a custom 1911 pistol, from slide and barrel fitting to installing the trigger and sights. This month, we'll revisit the project to do the final finish work and some range testing.

The last time we visited our Project 1911 gun, it was still in the white, meaning it had no finish on the metal surfaces and it had yet to be function or accuracy tested. It also had a swaged on front sight. These can shoot loose over time, especially with a hard recoiling load like the .45 ACP, 230-grain hardball round. We'd applied a little red Loctite when we installed it, and that is a very solid way to go, but I decided to replace it with a Novak dovetail front sight instead.



To remove the front sight, simply drive it out from underneath the slide with a sharp center punch. A couple of raps with the center punch and a hammer should get it started. Once it starts to come out, I normally grab the sight with the vise jaws and tap the slide up and off the sight. Drive the rear sight out from left to right, just like all parts held in by a dovetail cut.

I've personally installed about a hundred or more Bomar adjustable rear sights on 1911 pistols, but this process requires the use of a milling machine to make precise cuts. Do not try this in a drill press. Using end mills in a drill press is the fastest way to break the tooling and possibly ruin the workpiece, and most "hobby" milling machines are not up to the task either.

I used to have one of those milling machines, and making pre-

cise cuts was always a challenge. So, unless you happen to have a Bridgeport milling machine or its equivalent in your garage, or have access to someone who does, you will need to enlist the help of professional services.

THE END IN SIGHT

One such service that I utilize frequently for finishing is Accurate Plating and Weaponry (APW). APW and its owner, Bob Cogan, offer a wide range of gunsmithing services as well as custom finishes for firearms. These run the gamut from Hard Chrome, Black Chrome and nickel finishes to the latest Cerokote polymer finishes, but more on those later.

After a brief phone conversation with Bob, I sent him my Caspian slide, the Bomar rear sight (actually manufactured by Ken-



“Using end mills in a drill press is the fastest way to break the tooling and possibly ruin the workpiece.”

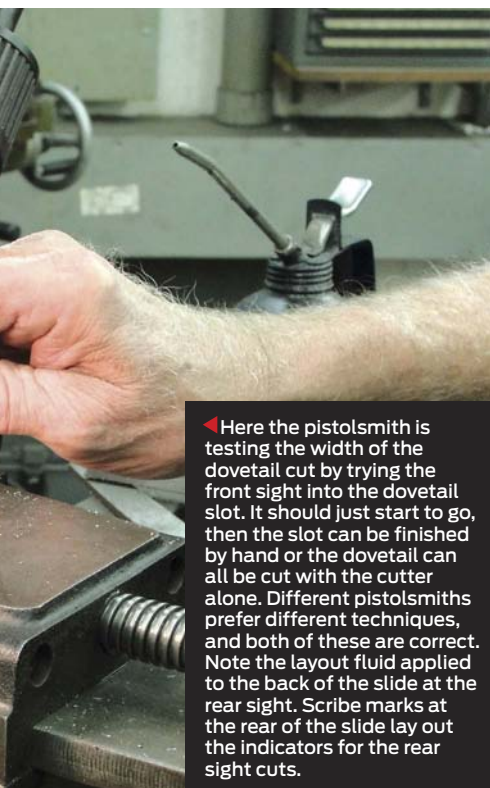
sight now) and the Novak dovetail front sight for them to machine the slide dovetails. You always have to send the sights to the shop doing the installations because of the variations in manufacturing tolerances.

Each sight will vary slightly in the dovetail dimension and height, and each sight has to be measured individually, otherwise there will be problems fitting the sights or the sight will have an ugly gap between the sight and slide. Remember, when fitting parts into a dovetail, the rule is ‘light tight.’ That means there should be no daylight showing between the two parts in the dovetail. If there is, that’s simply sloppy workmanship.

Once the slide was machined, APW sent the sights back to me and I fitted them into the dovetails. Next, the front



A stained wood case with foam padding (below) made a nice presentation case for my son's 21st birthday gift, and an engraved brass plate (above) added the perfect finishing touch.



◀ Here the pistolsmith is testing the width of the dovetail cut by trying the front sight into the dovetail slot. It should just start to go, then the slot can be finished by hand or the dovetail can all be cut with the cutter alone. Different pistolsmiths prefer different techniques, and both of these are correct. Note the layout fluid applied to the back of the slide at the rear sight. Scribe marks at the rear of the slide lay out the indicators for the rear sight cuts.

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sight is drilled through the sight and slide in order to be pinned later after the gun has been refinished.

The front sight gets serrated with the 75 LPI checkering file and is given a slight undercut, although if the shooter wants a ramp style sight, now would be the time to do that. I cut the sight down to about .180 inches tall and slope the top of the sight downward. I then blend in both sides of the front sight down to the slide with a #2 file and then remove the file marks with 320-grit sandpaper backed file. The rear sight is fitted and APW will drill and tap the elevation screw hole when the installation is complete.

Bob and his crew did a great job and when I got the gun back, it was off to the range for accuracy testing. I used two different loads in the Ransom Rest for this gun.

RESTING AND TESTING

One of the best things about the 1911 is that the gun is a versatile base and can be set up for multiple

roles. For example, even though we have installed an adjustable sight and the gun is a full size Government length, it can still be used as a daily concealment carry gun as well as a competition gun for IPSC Limited Class, IDPA and a handgun for 3-gun competition.

However, since this pistol will be my carry gun and a competition pistol, I tested it with Federal Match 230-grain hardball, and the Hornady 200-grain XTP load out of the Ransom Rest. There is a specific way to mount a pistol into the rest, but the Ransom Rest does come with specific instructions if you've never used one. Fortunately, every 1911 pistol I built for the DoD was tested on one for accuracy before the pistol was shipped, and I personally built over 500 of them, so I was familiar with the procedure.

After clamping the pistol in, I shot three 'settling' groups with the gun. During this phase, the gun has a tendency to string its shots vertically, then settle down and start

shooting groups. Once settled, the gun shot the Federal into a tidy .994 for five shots at 25 yards. Next up was the Hornady XTP 200-grain load, which shot a nice five-shot group of 1.210. I then ran some of my handloads through the gun as a sort of function test just to make sure nothing was seriously out of whack. My handload consisted of a Speer 200-grain LSWC behind 4.3 grains of Bullseye. Shooting off of sandbags I was able to keep the groups into about 2 to 2 ½ inches at 25 yards.

Feeding was good with only a couple of hiccups, which were quickly addressed. The extractor tension was a little too tight. Custom 1911's can be a little finicky until they get set up properly, and a good function test would actually be about 200 rounds. In fact, the gun shouldn't be carried until 500 jam-free rounds have been run through both the gun and magazines using the ammunition that will be used when the gun is carried.



▼ The painting technician is getting ready to apply the Cerakote finish to the Caspian frame. The gun has been disassembled, and all parts have been bead blasted to remove all traces of dirt, oils and unwanted foreign substances.



▲ The black Cerakote finish from APW is a beautiful, even finish that looks even better when paired with these rosewood stocks.

DO IT YOURSELF

The process of building custom 1911s remains extremely satisfying to me. Going from a box of parts to a finished product that looks and shoots great gives me the same sense of pride and accomplishment it did when all my finished guns were going to DoD personnel.

As a home hobbyist, you do not have to go to the same lengths I did in this Project Gun to get a great 1911. Buy a DVD or two and talk to a gunsmith you trust to learn how they do something. Most gunsmiths will be happy to help you.

Then, buy a used gun and do the work in steps. Start by installing a new, match trigger, then buy a sear jig and learn how to do a trigger job that will last for thousands of rounds. Next, install some sights.

If you're hesitant about metal checkering, start with wood checkering to get the hang of it until you feel confident enough to move over to steel. There are quite a few checkering guides in the pages of Brownells to get you started. The main thing is to go slow and take your time.



▲ A custom 1911 is a fun gun to shoot because it's so versatile, and this is where the Dillon RL550 comes in handy. It can turn out a large volume of high quality ammunition very efficiently. My Dillon reloader, set up with 4.4 grains of Bullseye and a Speer 200-grain LSWC, produced excellent groups at 25 yards.

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▲ Two holsters that would make a good set for competition and/or carry are the Safariland 6378 paddle holster with the ALS system, and the Bianchi Model 105 minimalist Belt slide holster.

FINISHING STRONG

Now that the gun has a new front sight and has been tested for accuracy and function, it's time to go back to APW to get the finish put on. I chose the black Cerakote for the entire gun, although Bob almost talked me into a two-tone gun with the slide black and the frame a satin Cerakote chrome appearance. I really like the old-school two-tone guns, but when the gun came back, I was not disappointed.

The finish was matte satin and a deep, all black coating that set up really nicely with the rosewood stocks I used. The Kart barrel, being chrome moly, was left in the white, but the barrel bushing and hammer were Cerakote in chrome finish, making for a really nice contrast.

The last piece of the build was to create a presentation case for

the gun. I found a craft store that sells unfinished jewelry boxes, so I bought one and then got some foam padding and satin material. I made cutouts for the gun and one magazine, and stained the box with a nice, deep walnut stain and polyurethane sealer and placed the gun into the case.

All in all, the Project 1911 was a fun project to build. The gun shot pretty good groups of under an inch, and with some ammo testing I'm very confident this is a ¾-inch gun for five shots at 25 yards. The Cerakote finish looks outstanding and will wear very well, and best of all, the gun just feels nice.

Say what you want about the polymer guns, there's nothing in the gun world like the solid feel of an all steel custom hand built 1911.

GW

CONTACT

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Brownells.com

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Dillon Precision Products, Inc.
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▲ Professional shooter Mike Foley (left), who shoots for Wilson Combat, helps Kyle get the most of his new gun at the range.



▲ The Project 1911 Gun shot 230-grain Federal Match into a sub-inch five-shot group, and the Hornady 300-grain XTP into a slightly larger 1.2-inch five-shot group.

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Sleek, Svelte & Sweet

Text & Photos by **Thomas C. Tabor**

Beretta's 20-gauge Parallelo revives the good old days of side-by-side shotguns with the best materials, first-class manufacturing, and a vision of a bright future





The engraving on the Parallelo is truly a work of gunsmithing art. (Beretta photo)

Many of today's firearms seem to lack elegance and old world charm. The metal finishes that once glistened in the morning sunlight are rarely encountered today, replaced by baked-on coatings, or sandblasted non-glare 80-grit finishes.

Fortunately, not all firearm manufacturers have succumbed to those trends, and recently I found a classic example of genuine wood and steel double barrel beauty in Beretta's new 486 Parallelo side-by-side shotgun.

I got my first glimpse of the 12-gauge 486 Parallelo at the 2014 SHOT Show. It was an exceptionally well-balanced shotgun that I felt would have been even better in a smaller gauge. Apparently, Beretta had similar thoughts and decided to debut their 20-gauge model at the 2015 SHOT Show.

Dusting a few clays during Media Day only whetted my appetite for the gun, and after returning home I arranged to have one shipped to me for a proper evaluation.



▲ The trim classic lines of the Beretta 486 Parallelo is also available with a straight English style stock, indicative of old world shotgunning charm. (Beretta photos)

A NEW DESIGN

Rather than revamping an existing shotgun, Beretta developed an entirely new design for the 486 Parallelo. The action is completely new, including different springs, a unique trigger group and a distinctive outward appearance. The goal was to maintain a classic styling, but incorporate materials and engineering features that would make the shotgun more durable and longer lasting.

The result was a side-by-side that merged old world craftsmanship with modern technology, producing a shotgun that's likely to become an heirloom passed down from generation to generation, and family to family.

The Parallelo arrived packed in a nice break-down style plastic case. Five interchangeable screw-in Optimachoke choke tubes (full, improved modified, modified, improved cylinder and cylinder) are included with the gun.

The Parallelo is chambered for 2 3/4-inch and 3-inch 20-gauge shotshells, including high-performance and steel ammunition. The

full choke tube is inscribed "no steel", but this is common with many shotguns.

FALLING IN LOVE

My first impression of the 20-gauge Parallelo was that it was nearly a mirror image of the 12-gauge model, but obviously scaled back a bit in size for the smaller 20-gauge. At just a tad over 6 1/2 pounds, the gun's weight was certainly appropriate for a 20-gauge double barrel shotgun. The appearance embodied the styling and characteristics of a fine European side-by-side.

The stock design geometry was straight, with only a 2 3/8-inch drop at the heel. This and similar straight stocks tend to direct recoil into the shooter's shoulder, keeping the gun in a safe position, ready for follow-up shots.

A nice touch to the wonderfully figured oiled walnut stock was a contrasting checkered walnut buttplate that added a bit of understated class to seal the deal for potential buyers.

When I asked where Beretta

sourced the wood for the Parallelo stocks, the Beretta representative hesitated to call it Turkish walnut, but revealed the wood was generally sourced from Turkey or in that general part of the world.

I found the metal engraving attractive and greatly complimented the gun's overall appearance. About the only metallic surface that lacked any engraving was the inletted petite silver-tone diamond medallion embedded in the forearm. I was pleasantly surprised to find when I removed the forearm stock that the metal surface had been jeweled to continue the attention to the smallest aesthetic detail. This was a nice touch and helped to demonstrate that even concealed areas received a certain degree of attention as well.

Intricate engraving adorns the receiver's silver-tone finish, contrasting nicely with the blued barrels. Thanks to Triblock manufacturing technology, the Parallelo's barrels have no visible welds to detract from its hand-crafted appearance, and they've been proven stronger than barrels

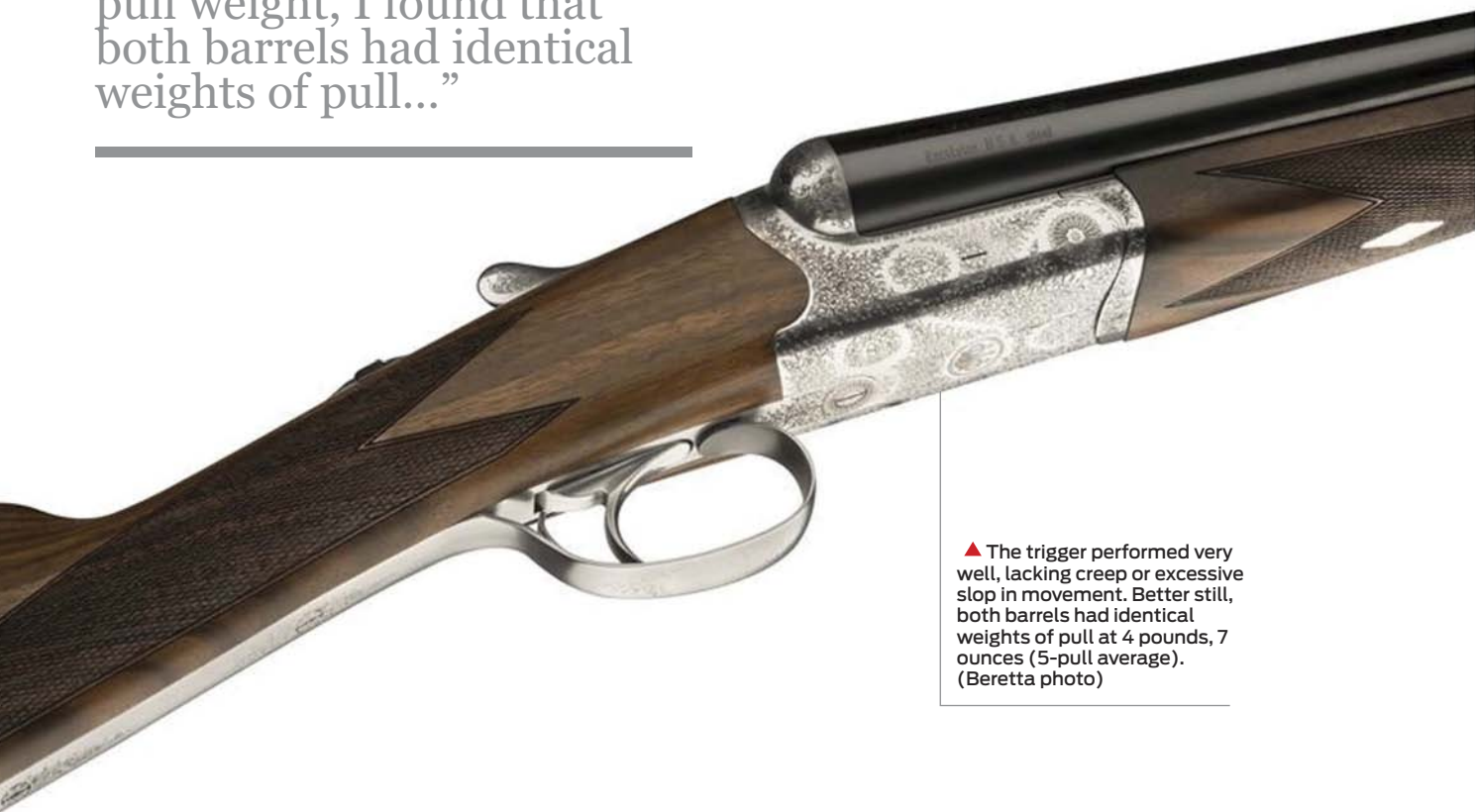


▲ The 486 Parallelo was shipped in a very nice hard plastic carrying case.



◀ The Optimachoke choke tubes mount flush with the muzzle and are marked with notches to indicate the choke constriction.

“When I checked the trigger pull weight, I found that both barrels had identical weights of pull...”



▲ The trigger performed very well, lacking creep or excessive slop in movement. Better still, both barrels had identical weights of pull at 4 pounds, 7 ounces (5-pull average). (Beretta photo)

SPECIFICATIONS

486 PARALLELO

Manufacturer: Beretta USA Corporation

Gauge: 20-gauge, but available in 12 and 28 as well

Weight: About 6 pounds, 10 ounces

Sights: Single muzzle bead

Action: Side-by-side double barrel

Chokes: 5 screw-in Optimachoke choke tubes (full, improved modified, modified, improved cylinder and cylinder)

Barrel: 28 inches

Stock: Turkish Walnut

MSRP: \$5,350

fabricated using other processes.

Selective automatic ejectors and an automatic safety are standard equipment. Although the barrel selector is located on the top of the safety, each device operates independently of the other.

PATTERNING: SHOTGUN ACCURACY

Patterning is an important part of any shotgun evaluation, but dozens of variables can influence the results of what should be a fun activity. One of these variables is ammunition choice.

Let's say you've wrapped up a busy afternoon patterning your gun and things are looking good. The pellet concentrations are well inside the kill zone and you'll be the envy of your hunting partners. Then, you pick up another brand of ammunition, and your trusty scattergun is no longer with the program.

In my experience, shooting dis-

similar types of ammunition will likely require repeating the patterning drills to document consistencies and variations in the patterns. The goal is to determine the best ammunition for your gun to stack the deck in your favor against the wild game you're pursuing.

To provide yet another variable to factor in your patterning program, the inside diameter (large, small, or in-between) of your shotgun's choke constriction also plays a significant role in the density of those patterns.

Because of these and other variables, I encourage shotgunners to pattern their own shotguns using the ammunition they intend to shoot in that gun.

I chose to pattern the Parallelo using the three most popular choke tubes — full, modified, and improved cylinder — relying on two primary Remington factory loads.

The larger of the two was Rem-



▲ The Beretta comes with selective automatic ejectors that kick the fired shotshell hulls out as the action is opened.

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“The Parallelo came to my shoulder smoothly and consistently, with no corrections on my part.”

▲ The hand checking on the Beretta was nicely done.

PERFORMANCE

PATTERNING THE 486 PARALLELO

Remington 3-inch Nitro Pheasant Magnum 1 ¼-ounce #6 Copper Plated Lead (Number of Shot & Percentage within 30 inches)

Improved Cylinder Choke
(30 Yards)
197 - 79%

Modified Choke
(40 Yards)
165 - 66%

Full Choke
(40 Yards)
156 - 63%

Remington 2 ¾-inch Express Long Range 1-ounce #7 ½ Lead Shot (Number of Shot & Percentage within 30 inches)

Improved Cylinder Choke
(30 Yards)
268 - 81%

Modified Choke
(40 Yards)
247 - 75%

Full Choke
(40 Yards)
234 - 71%

Note: The percentage figures above are based on actual shot count and not table estimates based on weight. The actual shot count was 281 pieces in the 1 ¼ ounce of #6 copper plated and 329 pieces in the 1 ounce of #7 ½.

ington's 3-inch Nitro Pheasant Magnum loaded with 1¼ ounces of copper-plated lead shot rated at 1,185 fps muzzle velocity.

From the 2¾-inch camp came the Remington 2¾-inch Express Long Range loaded with 1-ounce of #7½ lead shot and rated at 1,220 fps. Typically, improved cylinder chokes are used at closer range, so I decided to pattern that particular choke at 30 yards, but the modified and full chokes were patterned at the standard 40 yards.

The result of that testing produced a classic example of why a shooter needs to always pattern their shotguns rather than simply relying on the choke designations.

What I found in this particular case was that both the modified and the full choke tubes produced very similar pattern densities at 40 yards and that was with both types of ammunition. Other types of shotshells could easily produce different results, so test before hitting the field.

ON THE RANGE

I gave the Parallelo a casual workout popping random hand-thrown clay targets as well as shooting singles from the 16-yard line at the trap range.

A diverse selection of Remington shells, including 3-inch magnums, waterfowl-legal steel shot shells, and nearly every 20-gauge target load variant were used in this evaluation. The Parallelo performed well with each of the different shells without any issues.

The Parallelo came to my shoulder smoothly and consistently, with no corrections on my part. Looking down the barrel, the rib and bead aligned precisely, indicating a well-proportioned shotgun that fit my anatomy quite well.

While it might seem like a minor point to some, if I had one complaint about the Parallelo it would have to be the tiny

amount of slack in the trigger before it engaged the sear, possibly causing some shooters to develop flinching problems, although highly unlikely with the mild-mannered 20-gauge.

Otherwise, the trigger performed very well and lacked creep or excessive slop in its movements. When I checked the trigger pull weight, I found that both barrels had identical weights of pull at 4 pounds, 7 ounces (5-pull average). That in itself was pretty amazing. The spread between the pull weights varied, however, by 10.4 ounces in the right barrel and 1 pound, 2.4 ounces in the left.

While the test 20-gauge Parallelo came equipped with a pistol grip stock, you can also choose a straight English-style stock. There are also 3 choices in the 12-gauge that come with varying styles of stocks, barrel lengths and choke

configuration and a 28-gauge.

But no matter what stock, grip or gauge choices you make, the Parallelo offers you a chance to experience its elegant, old world charm, and that is something you may not want to miss. **GW**

CONTACT

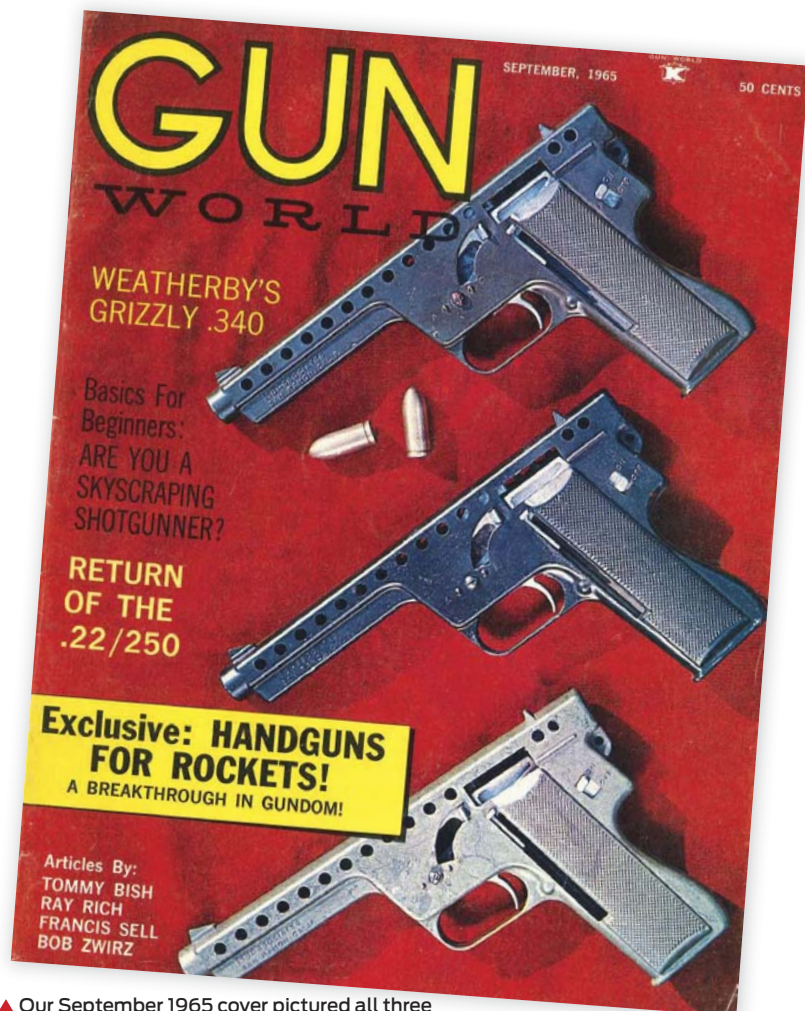
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▲ Our September 1965 cover pictured all three variations of the storied Gyrojet rocket handgun from MBAssociates.

POCKET ROCKETS

By Craig Hodgkins

The news was first received when Hank Henry, a cutlery maker in Walnut Creek, California, phoned the *Gun World* offices to inform them of what he considered “one of the most advanced innovations in firearms yet conceived.”

Despite finding it difficult to believe that any “unknown” firearm could be “so highly perfected as to perform the feats described over the phone,” the editorial team was

unable to resist the bait, and dispatched technical editor Tommy Bish by plane to the MBA experimental rocket laboratories, located high in the rolling hill country northeast of Oakland in San Ramon. The purpose? To “examine, test fire and evaluate a revolutionary new handgun designed by this firm as the Gyrojet Rocket.”

What Bish found was indeed intriguing. The pistol was made of

die cast Zamac, a “high impact seven percent silicon aluminum alloy,” and weighed in at less than twelve ounces.

“In spite of its light weight,” Bish’s subsequent article stated, “this pistol fires — or more literally, launches — a Gyrojet bullet-shaped rocket in 13mm which is propelled by a cylinder-shaped charge of solid grain rocket fuel.”

But perhaps the most interesting thing about the MBAssociates pocket rocket was the firing technique it employed. Instead of the hammer striking the primer from the rear, “it strikes the nose of the rocket, driving the rocket to the rear where a fixed firing pin detonates the percussion primer thus firing the projectile.”

The greatly reduced recoil was another factor in its consideration as a “possible Space Age sporting arm of the not too distant future.” The recoil of the Gyrojet was “less than one-tenth that of a .45 automatic pistol yet its kinetic energy on the target (was) twice that of the caliber .45 bullet.”

The Gyrojet was intended to be a member of a “fast growing family of such weapons being perfected and developed by the MBA laboratories.” These others included a pistol, a carbine and a rifle, as well as a Lancejet underwater gun and a “twelve-barrel handgun similar in appearance to the pepperbox firearms of a century ago.”

Despite being featured in a few spy movies of the day, the Gyrojet never received considerable distribution, and the 1968 Gun Control Act forced a Mark II version of the pistol in 12mm (the original 13mm rounds fell under the term “destructive device” because of their size). But issues with inaccuracy and a high cost per round were really what did the gun in, and today, existing models tend to be rarely shot collector’s items. **GW**

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